

Technical Report

Best Practices Evaluation for the Annie E. Casey Foundation

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Introduction

CPS Human Resource Services (CPS), formerly known as Cooperative Personnel Services, assisted the Annie E. Casey Foundation in a search for “best practices” in Human Resources Management (HRM) in organizations responsible for the delivery of child welfare and social services across the U.S. The purpose of the search was to identify HRM initiatives that would strengthen the workforce responsible for providing services to disadvantaged children and families.

The Annie E. Casey Foundation sponsored the human services workforce initiative that funded the current research. The Foundation’s operating assumption was that by increasing the quality of worker and the quality of management practices, agencies could improve the services delivered to social welfare recipients (with an emphasis on women and children). The Foundation’s main focus for their sponsorship was to improve the delivery of services to children in need, and intervening events were expected to moderate the delivery pipeline.

Two agencies were selected for further research. They were Hamilton County, Ohio, Job and Family Services (JFS) and the State of Michigan Family Independence Agency (FIA).

Hamilton County Job and Family Services

The Hamilton County Internet site (<http://www.hcjfs.hamilton-co.org>) described JFS as the largest combined human services agency in Ohio at the time of this study. Public Assistance, child support and child protection programs were all administered by this single organization. As of the date of the current study, JFS had 1,437 employees.

JFS programs served more than 300,000 Hamilton County residents per year. Their Website said those programs included:

- Income Maintenance (temporary cash assistance, food stamps, and Medicaid)
- Child Care Services
- Workforce Development
- Child Support Services
- Child Protection (Children’s Services)
- Adult Services (Adult Protective; Enhanced Medicaid Transportation)
- Supplemental Security Income case management
- Mt. Airy Shelter for homeless men
- TB Control

JFS received accreditation by the Council on Accreditation for Children and Family Services. It was one of the few, if not the only, public agency with a full breadth of services to be accredited.

Pay for Performance Best Practice

The best practice identified at JFS was a Pay for Performance (PFP) program that linked pay increases and bonus awards to performance. Employees who received high job performance ratings were eligible for higher salary increases and bonus awards than were employees who received low performance ratings.

Linking work goals, appraisals of job performance and organizational rewards have long been supported by research in management sciences (e.g., Brandstätter, et al., 2003; Nathan, B. R., Mohrman, A. M., Jr., & Milliman, J., 1991; McMaster, 1994; King, J. B., 2003). One of the first articulations of goal-setting theory was presented by Locke (1968) and it can be traced back at least as far as management by objectives (Drucker, 1954). The theory and practice of goal setting has accumulated impressive results and support from numerous scientific tests.

The general line of findings has been that goals that are clear, measurable, and attainable were consistently found to motivate employee effort. Specific goals produced higher levels of work effort than no goals and general goals, like “do your best.” Regular and detailed feedback on work progress also improves performance by identifying discrepancies between what employees did and what they wanted to do. In effect, feedback was instrumental for guiding and improving the effectiveness of employees’ work effort and, thus, to result in the attainment of more work goals and high levels of job performance. Rewarding high performance with recognition and compensation was shown to help sustain and strengthen the system of goal setting-effort-feedback-outcome (Locke, 1980).

At the time this study was conducted, the PFP program was based on policy with little written description or documentation. Information about the program’s features, procedures, and outcomes was obtained from a series of interviews with the agency’s officials in human resources, children’s services employees, and union representatives.

One of the more unusual features of the program was that it was endorsed and supported by the union that represented the agency’s non-exempt employees. The concept of introducing a PFP system linked to salary administration was first proposed to the agency’s union officials in 1997.

At the time the PFP program started, a large proportion of the agency’s employees were at or near the maximum of their salary ranges. Therefore, they had very limited opportunities for continued growth in their salary and other forms of compensation. In part, PFP was seen as a way to become less dependent on the agency’s traditional pay structure and allow for employees’ continued growth in income regardless of where they were within the pay ranges of the existing salary structure. With the union’s endorsement the original PFP program was introduced in 1998 and it included all employees working at JFS.

At its inception, the formal goals and expectations of the program included the following:

- Increase motivation for job performance
- Reward good performance more than mediocre performance
- Encourage retention of the best performing employees
- Deliver better service to clients through the better performing employees retained

A key feature of the PFP program was the use of formal work objectives. Each employee was given a document that listed the major work objectives for the period of time encompassed by the performance evaluation. At the end of that period, the degree to which each employee's objectives were reached serves as the basis for their supervisors to assess their job performance.

Pay for Performance Operations

Most job classes in JFS had one level (similar to broad-banding) with minimum and maximum pay rates that changed periodically based on cost of living allotments. Movement within a range was based on performance as rated by the supervisor using criteria such as goals, competencies, and steps taken toward professional development.

JFS had an elaborate point system that served as the basis for determining the percent of pay increase. Potentially important weaknesses in the PFP included the complexity of the point system, the degree to which it was understood by supervisors and employees, and suspicions of the overall program by employees who do not understand it.

Operational changes in PFP. When it was first introduced, PFP relied heavily on general work objectives. After the program's first year, PFP underwent a number of refinements that were designed to improve the plan's effectiveness. Those refinements included:

- Revising statements of major work objectives (MWOs) to add detail and specificity
- Standardizing work objectives so that they were consistent across similar jobs and linked to organizational goals
- Holding regular feedback and discussion sessions between supervisors and employees
- Increasing the communications to employees about the manner in which the program was administered.

Initially, PFP was negotiated with the labor union representing JFS employees. Collaboration between union and management on this type of program was unusual and, in part, it contributed to the program's designation as a best practice. The first performance objectives were set cooperatively by management and labor unions, and that joint approach to objective setting continues today.

At the time of this study, there were no events underway that were expected to affect responses to the data collection efforts.

Michigan Family Independence Agency

According to their Internet site at the time of this study (<http://www.michigan.gov/fia>), FIA was Michigan's public assistance, child and family welfare agency. FIA directed the operations of public assistance and service programs through a network of offices in every county in Michigan.

Local offices administered the federal Temporary Assistance for Needy Families grant (Family Independence Program) and the Food Assistance program, and they accepted applications for Medicaid which is administered by the Michigan Department of Community Health. Other assistance programs FIA administered were:

- Medical assistance, jointly funded by the federal government and the state
- State disability assistance and state medical services program, both of which were funded by the state
- State Emergency Relief Program
- Food stamps, a federally funded program
- Child support collection and client welfare fraud investigation programs

In addition, the agency provided other services to children, adults, and families in the state. Services to adults included:

- Protective services
- Adult placement services
- Home help services
- Assistance with health, housing, transportation, and educational needs

Family services were provided to help maintain and strengthen family life and to help families become self-sufficient. They included referral for employment and training, independent living services providing housing assistance, family planning, counseling, health-related services, volunteer services, refugee assistance, foster family care, transitional services to youth exiting foster care/out-of-home placements, child day care, migrant services, Native American services, and domestic violence prevention and treatment programs.

A wide range of service programs was available for the families and children of Michigan. They included protective and preventive services for children who were neglected, abused, or exploited, including foster care placement. The agency also provided a wide range of institutional and non-institutional social services for the care, training, and treatment of neglected and delinquent youth committed to the agency as state wards and temporary court wards. Such services included:

- Casework and counseling
- Adoption
- Foster care
- The operation of centers for institutional residential care and group homes

In addition, FIA offered consultation on general child welfare problems to private and public agencies throughout the state and offers services through the Interstate Compact. FIA also administered a number of special and autonomous entities including the Michigan Domestic Violence Prevention and Treatment Board, and the Children's Trust Fund.

FIA employed about 10,500 people at the time of this study. About a third of the employees were in Wayne County (the Detroit area). There were employees in almost all of the 83 counties (in at least one situation, employees located in one county service a two-county area). There were approximately 130 employee locations, ranging in size from under 20 to several hundred in the Central Office in Lansing.

Centrally Coordinated Hiring Pool Best Practice

The best practice identified at Michigan FIA was a centralized process for employee recruitment and selection. The program was known as the Centrally Coordinated Hiring Pool (CCHP). CCHP was identified because it was a way of filling positions quickly in a traditional civil service system that originally was very slow.

In late 1990s, FIA recognized a need to reduce the time period for refilling jobs under the traditional civil service process, and up to eight weeks of classroom training. CCHP was created to streamline the hiring process and shorten that time for filling vacancies. The program began operations in January 1999. The primary goal of CCHP initially was to shorten the time required to fill job vacancies with qualified hires.

Traditional hiring process before CCHP. Throughout the 1990, Civil Services rules evolved from a process where applicants were required to take written exams and were then placed on certification lists to a process where applicants were simply placed on certification lists based meeting the E & E for the classification. When a vacancy arose, county offices requested a list of certified candidates from FIA's Human Resources Department and scheduled interviews with the candidates on their own. Managers interviewed from the list of candidates, but often the names on the list had been there for many months, and sometimes years.

The common selection practice of local offices was to interview candidates based on questions and procedures developed independently by each local office manager. The scheduling of interviews was notoriously time-consuming, and delays of up to six months were common in refilling vacated positions.

Job applicants might interview multiple times and at multiple locations. A tactic frequently used by applicants to gain entry to the agency was to accept a job at an undesirable office and then transfer to a more desirable location at the first opportunity. That tactic resulted in high rates of internal employee movement, and elevated the affects of turnover in many inner city offices.

Need for change in hiring. From the perspective of job applicants, the benefits from CCHP included faster and more convenient hiring processes. The Human Resources Department became the central point of contact for job applications. Therefore, applicants had to interview only once and that interview was held in a central location. However, several years following CCHP's introduction, budgetary priorities resulted in reductions in FIA's staffing levels and hiring activities.

Turnover. One goal of CCHP was to predict turnover and anticipate the number of people who might leave each month before they submitted formal notice. Turnover was seen as an important obstacle to the delivery of consistent services to clients. When vacancies arose in a field office, the entire caseload of the departing worker was redistributed to the remaining employees while the office waited for a replacement employee. The new employee would receive a small number of cases as new ones arose in order to acquire training and experience with work procedures. Recipients of the distributed caseload would not know the subtleties of cases they inherited, many of which could not be captured on paper, and they had to rely heavily on documentation while building a relationship with the client from scratch. A common perception among both employees and managers was that these factors reduced the overall quality of services delivered to clients.

Complaints about CCHP from employees mostly stemmed from being hired and placed in a county that was not their first choice. At one time, job applicants could indicate a region or a range of counties in which they were willing to work. Applicants had to agree to work in any of the counties within the selected region. More recently, applicants were allowed to rank order counties on the basis of desirability instead of picking a whole region.

CCHP Development and Improvement

As CCHP developed after its first year of operation, two additional goals for the program were to improve the quality of hire and reduce employee turnover. To address both of these goals, FIA performed a validation study of the job-related competencies needed for successful job performance. The CCHP screening process was then extended to assess the most essential work-related competencies.

The second approach that FIA introduced to improve the quality of new hires was a standardized behavioral-based interviewing process to screen applicants. The program included the following features:

- Identification and definition of key competencies needed for successful job performance
- Development of behaviorally-oriented questions designed to assess specific competencies in job candidates
- Training of all interviewers in behaviorally-based interviewing and assessment procedures
- Multiple interviewers conducting interviews under standardized conditions that were free from disruption
- Recording of interviewee behavioral responses to all questions presented during the interview
- Evaluation of candidates' job qualifications based on their interview responses compared to specific criteria after the interview was concluded

Behaviorally-based interviews allowed hiring decisions to be made quickly while the best qualified candidates were still available. Potentially, that could further reduce the turnaround time from job vacancies arising, recruiting and screening applicants, and refilling jobs.

Behaviorally based interviews have been widely supported by research findings in the behavioral and managerial sciences (e.g., Orpen, 1985). Fear and Chiron (1990) were among the first to espouse the personnel selection benefits available from focusing on behavior in the popular media. To some degree, popular techniques have evolved for analyzing essential work competencies, preparing for interviews, designing standardized questions and procedures, and making decisions based on behavioral evidence (e.g., Still, 1997; Fitzwater, 2000). However, the majority of behaviorally-based approaches has remained consistent and received support for its effectiveness (Schmidt and Hunter, 1998).

One of the most thorough and convincing investigations on this topic was reported by McDaniel, Whetzel, Schmidt and Maurer (1994). The authors performed a meta-analytic study of employment interview research that encompassed over 86,000 individuals. Among their findings were that structure and consistency in interview procedures was one of the most important features for predicting future job performance and success on the job. The design of CCHP included consistent interview procedures and standardized questions, both of which coincided closely with the findings and implications from this comprehensive meta-analysis.

In addition to improving the prediction of job success and tenure, CCHP was designed to improve the overall selection process. That included making improvements in the applicants' perception of fairness and responsiveness, such as by reducing frustration that resulted from inconsistent procedures and communication to applicants. A recent meta-analytic study of such improvements (Hausknecht, Day & Thomas, 2004) found strong corollary benefits for efficient hiring processes that included stronger applicant intentions both to accept job offers and to recommend the employer to others.

Initially, all FIA employment interviews took place in Lansing and Detroit regardless of where the job was located. Job offers then were extended by the FIA Human Resources Office, and applicants were required to specify that they would work in a specified list of counties.

Efficiency. FIA managers reported that CCHP saved field managers a lot of time. Supervisors who could recall pre-CCHP practices commented on the time it took to screen resumes, schedule interviews, conduct interviews, etc. One significant benefit to all parties was the program's consistent procedure for assessing and hiring employees across the state. Previous practices allowed a lot of managerial leeway in interviewing and, with it, also a lot of variability in the quality of interviews.

The CCHP ensured the application of a consistent process using behaviorally-based questions that measured job competencies across all interviewers and candidates. The program's design was considered "state of the art" and produced more consistent and higher quality results.

Supervisory feedback indicated that the quality of people in the ready pool improved during the last couple of years over the quality of CCHP's initial rollout. That perceived change might reflect changes in the introductory training provided to all new case workers by the Child Welfare Institute (CWI) as well as changes in CCHP effectiveness. CWI was an FIA training unit that delivered new employee training that was required by government regulations.

Feedback also indicated that employees hired from the CCHP pool were of higher quality than employees hired before CCHP. Among the potential criteria in which CCHP-hires excelled were the speed at which new workers adapted to local county procedures and how well they were prepared to engage in field casework.

Time to refill vacated positions. Before CCHP, the time delay in filling vacated position was three to four months. After CCHP was introduced, the time delay fell dramatically. Some positions were filled immediately, and others in two to four weeks. In highly unusual cases, it may have taken as long as six to eight weeks. Managers were not cognizant of the six-to-eight weeks of training required by Federal regulations at the time CCHP was introduced and CWI was created. Field manager indicated a lack of distinction between CCHP and CWI – they saw only the product of both programs combined.

Hiring freezes. Perceptions of CCHP might have become clouded because of environmental and budget issues – especially freezes placed on hiring. Reduced FTE allocations and a hiring freeze were placed on major divisions in FIA during the last two years. Those restrictions resulted in fewer transfer opportunities for FIA employees. Some job applicants interviewed in 2003 had not been contacted for placement by the end of the first quarter in 2004.

Hiring freezes restricted hiring in some divisions at the time of this study. FIA anticipated the possibility of forced relocations by which the least senior employee in an office might be selected for transfer to another office. For approximately the previous two years, the time for backfilling vacancies increased because of indirect consequences from those hiring freezes – a reduced schedule of CWI training and a lower volume of hiring for the ready pool. CCHP anticipated a continued hiring freeze and fewer transfers out of Protective Services to other areas through 2004.

Program evaluation. Very little documentation was available on the initial design and intent of CCHP. The program was developed to meet operational needs. Approximately eighteen months after CCHP implementation, FIA conducted a survey of employees, supervisors and managers to obtain feedback about satisfaction with the program. No further formal evaluation occurred until the current review conducted under the Annie E. Casey Foundation grant. In addition, the CCHP evolved incrementally, and all of its development is not especially well documented.

Among the goals of the present research was to find out whether employees and supervisors were more satisfied after CCHP than they were before CCHP, and whether that difference was due to jobs being filled faster and with better qualified people. Several potentially significant difficulties were identified in conducting an effective evaluation, and they are summarized below.

1. One of the first difficulties identified was the length of time that CCHP had been in operation. Many of the supervisors who had experience with the “old hiring process” retired during the massive “early out” program in 2002. Even those who had supervisory experience before 1999 are believed to have a hard time vividly recalling hiring practices more than five years earlier. Many current employees were hired

- under the program and would not have a frame of reference that extended to the previous process
2. The overall budget situation in Michigan resulted in fewer employees, higher workloads, less training and developmental opportunities, restricted travel, and other similar types of cost containment. It was expected that they will have a negative impact on overall job satisfaction and that they might be reflected in the survey results.
 3. Due to the huge budget deficit, resources were severely limited, nearly 20 percent of the children's services workforce had been lost to early retirement, and hiring restrictions precluded the CCHP process from doing "advance hiring." Although the hiring process was still centralized, and behavioral interviews conducted, the practice of advance hiring had not regularly occurred since the spring of 2003. Given that it had been well over a year since the CCHP had functioned as designed, we expected that survey responses would reflect the current situation rather than the environment when the CCHP functioned optimally.

The cumulative effect of such changes was expected to be disruptive of employee and supervisory perceptions, work morale, and work processes. However, the magnitude and direction of such influences could not be estimated.

Hypotheses

Based on the characteristics of the programs selected for assessment of best practices at Hamilton County JFS and Michigan FIA, the following hypotheses were made regarding the attitudes and perceptions of employees and supervisors.

Hamilton County JFS Employee Opinions

Six hypotheses were made that focused on the attitudes of JFS employees. Five of those were directional and one was exploratory (or non-directional).

1. The PFP program at Hamilton County JFS was designed to improve communications between employees and supervisors through the process of mutual goal setting, regular feedback meetings, and performance review discussions. Therefore, it was predicted that employees at Hamilton County will be more satisfied than employees elsewhere with the overall process by which their performance is reviewed.
2. The PFP program at Hamilton County JFS relied on clear and specific goals that were largely under the control of workers. That process was expected to result in higher levels of employee goal attainment. Therefore, it was predicted that perceptions of work quality will be higher at Hamilton County than under more traditional performance management programs.
3. The process of holding regular feedback and development sessions between employees and supervisors was reported to be one of the most important aspects of the PFP program at

Hamilton County JFS. That individualized feedback and development was expected to increase job-related competence of employees. Therefore, it was predicted that employees will hold more favorable perceptions of employee competence at Hamilton County JFS than at more traditional performance management programs.

4. Part of the effectiveness of performance planning and feedback has been attributed to the personalized and on-going focus on training of individual employees once they were hired into the job. It was of interest to learn whether on-the-job training driven by PFP will be seen as more effective than the concentrated classroom-style training of FIA's CWI program. Therefore, a non-directional hypothesis was formulated to determine whether any differences existed between the training employees receive under each of the two innovative programs.
5. Performance management programs often focus more on work outcomes than on work effort. However, the PFP program at Hamilton County JFS incorporated frequent feedback meetings between employees and supervisors that helped to ensure open communications and collaborative problem solving. Based on that feature, it was predicted that employees acting in concert with their supervisors would receive rewards based on their efforts as well as on their work outcomes.
6. The overall impact from a focused goal setting and feedback program has repeatedly been found to improve the goal achievement of individual employees. Therefore, it was predicted that services provided to customers will be seen as improving more under the PFP program at Hamilton County JFS than under a traditional performance management program.

Michigan FIA Employee Opinions

Two non-directional and eight directional hypotheses were formulated to assess employees' attitudinal outcomes from FIA's program.

7. One of the original goals of Michigan FIA's CCHP program was to reduce the disruption at local offices caused by employee turnover. A non-directional hypothesis was developed to assess whether the disruption caused by turnover will be seen as a greater obstacle to service delivery by the employees in Michigan FIA than by employees elsewhere.
8. Among the goals of the CCHP were more effective filling of vacated positions and reductions in employee turnover. Those benefits were expected to result in more stable and predictable work demands for employees, such as by reducing the demands of managing the continuity of client cases. Therefore, it was predicted that employees in Michigan FIA will report lower workload stress than will employees who work in more traditional staffing programs.
9. Because of reductions in the redistribution of workloads associated with employee turnover, it was predicted that the fairness of workload distribution will be viewed as more favorable among Michigan FIA employees than by employees elsewhere.
10. CWI training was introduced in Michigan FIA a short time prior to the CCHP, and its primary purpose was to ensure adequate training of newly hired employees. Therefore, it was predicted that employees will feel that they were better oriented and prepared for their initial jobs at Michigan FIA than at elsewhere.

11. By the same reasoning, it was predicted that the initial training by CWI will be seen as more adequate by employees at Michigan FIA than elsewhere.
12. One of the purposes of the CCHP program at Michigan FIA was the standardization of recruitment and selection processes, replacing a highly decentralized staffing process that existed previously. It was predicted that the standardization of recruitment, selection, and training practices would improve perceptions of the overall hiring process from the perspective of new hires.
13. The standardization of employee recruitment and interviewing procedures under the CCHP program at Michigan FIA were expected to improve the overall effectiveness of personnel selection. Therefore, it was predicted that recently hired employees at Michigan FIA will be seen as better qualified than will employees hired under less standardized procedures.
14. Michigan's CCHP program implemented a 30-item instrument (the Job Fit Tool) in 1999 which was designed to improve the fit between the talents and interests of job applicants and the demands of the jobs for which they were hired. As a result of this assessment step, employees at Michigan FIA were predicted to report greater congruity than employees elsewhere between the requirements of their jobs and their skills and abilities.
15. Based on the favorable fit between Michigan FIA's employees and jobs, it was predicted employees at Michigan FIA will report more in the way of intrinsic rewards from their jobs than will employees at more traditional locations.
16. One potential source of employee turnover at Michigan FIA was attributed to an absence of procedures for giving prospective job applicants a realistic preview of their jobs. Plans were underway at FIA to introduce a standardized realistic job preview, but those efforts were still in progress at the time the present study was conducted. To assess the validity of this perception, a non-directional hypothesis was developed. An analysis will assess whether employees at Michigan FIA report receiving less information about their jobs at the time they were hired than will employees elsewhere.

Both Programs

Each of the innovative programs included in this study were expected to improve employee performance and satisfaction. However, there was no basis to predict whether one program might be more effective than other in either respect. Therefore, one non-directional hypothesis was formulated to determine the following:

17. Whether any difference will be found in the level of overall job satisfaction between the employees at Michigan FIA and Hamilton County JFS.

Supervisor Opinions

It was expected that supervisors and managers would have interests related to PFP and CCHP that affected their role responsibilities. Therefore, seven hypotheses were developed to compare the opinions and perceptions of supervisors at each agency.

18. A central purpose of the PFP program at Hamilton County JFS included setting clear work goals for employees, improving on-going monitoring and feedback of progress, and assessing

performance based on specified criteria. Those characteristics were expected to improve the work effectiveness of individual employees. Therefore, it was predicted that supervisors will attribute the causes of improvements in employee productivity specifically to performance reviews more at Hamilton County JFS than at agencies using more traditional performance management practices.

19. The PFP program was expected to improve employee productivity but it also entailed some costs. One of those costs was a greater work burden on supervisors because of improvements required in the clarity of work goals, the frequency and duration of feedback meetings, the frequency of performance review sessions, and so on. Most supervisors reported that they received little or no formal training for their roles in that process. Therefore, it was predicted that supervisors at Hamilton County JFS will be less satisfied with the training they received for their roles in the performance management process than will supervisors elsewhere.
20. The primary goal of Michigan FIA's CCHP program was to improve the quality of new hires and the responsiveness of staffing assistance for local office managers. Therefore, it was hypothesized that supervisors and managers at Michigan FIA will report receiving better service from CCHP than will managers at agencies that use more traditional staffing procedures.
21. One of the most frequently cited criticisms by supervisors at Michigan FIA was that, despite the improved efficiencies they saw resulting from CCHP, they still wanted more personal discretion in making hiring and staffing decisions than they felt they had. Therefore, it was predicted that supervisors would express lower satisfaction with their authority in employment decisions at Michigan FIA than elsewhere.
22. The standardized recruitment and interviewing procedures developed for the CCHP were expected to have a number of important benefits which included hiring better qualified employees. Therefore, it was predicted that supervisors at Michigan FIA will report better quality results from hiring over the past five years than will supervisors elsewhere.
23. The introduction of CWI coincided with the start of CCHP, and it was intended to improve the consistency and adequacy of training for newly hired employees at Michigan FIA. Therefore, it was predicted that supervisors at Michigan FIA will see their new employees as being better trained than will supervisors elsewhere.
24. Based on the benefits offered to supervisors by the CCHP program at Michigan FIA, supervisors there were predicted to be more satisfied with their procedures for recruiting, screening, and hiring new employees than will supervisors in more traditional programs.

Opinions on Hamilton County Improvements

A number of initiatives were started recently at Hamilton County JFS to improve the PFP program. Among the goals of those initiatives were: improving the specificity of MWOs, increasing the frequency of performance review meetings between supervisors and employees, and clarifying the PFP program's administration. Details of those initiatives were not specified, however, and it was not known whether they were implemented early enough to have an impact on employee knowledge and perceptions. To investigate the potential consequences of these initiatives, the following six non-directional hypotheses were made.

25. Hamilton County JFS focused on clarifying and communicating the PFP program more effectively during the past two years. Therefore, the present study will assess whether the PFP program is seen as being fairer to employees now than it was four years ago.
26. Hamilton County JFS has emphasized the importance of feedback and development discussions between supervisors and employees. Therefore, it was investigated whether employees will see their performance as being more regularly monitored than they did four years ago.
27. The present study will investigate whether clarification of the PFP program's rewards of merit pay and bonus pay will make those outcomes more important and valued by employees than they were in the past.
28. Clarification of the PFP administrative procedures was expected to improve employee understanding of the system. Therefore, the present study will assess whether employees will rate their understanding higher now than they did four years previously.
29. Improvements made in the PFP program at Hamilton County JFS were expected to make the overall PFP process more attractive and valued to employees. Therefore, it was investigated whether employees in the current study will find the outcomes from the PFP program to be salient now than in the past.
30. Improvements made in the PFP program were expected to improve employee perceptions of the overall program. Therefore, employee perceptions of the overall effectiveness of the program will be assessed to determine whether they are higher in the present study than they were four years ago.

Hamilton County JFS Outcomes

In addition to employee and supervisor perceptions of work effectiveness, direct measures were sought on the quality of services delivered to the clientele of Hamilton County JFS. Archival data on service time and accuracy were obtained and assessed for their suitability in this study. A general hypothesis was made that when work outcomes were under the control of individual employees, those outcomes would show improvement over time.

Methods

CPS selected a variety of converging methodologies to evaluate the effectiveness of human resource management “best practices” in Hamilton County JFS and the State of Michigan FIA. Those methodologies included:

- Review of program purpose, history, and design
- A series of focus group discussions with employees, supervisors, quality control professionals, and human resource representatives
- Interviews with senior and executive management
- Employee and supervisory surveys designed to assess attitudes and perceptions toward key practice areas
- An analysis of operational measures of client service outcomes

The results from interviews and focus groups identified a number of key indicators that were common to both organizations and indicators that were unique to each organization. Survey instruments were then tailored to assess perceptions of all of the identified common indicators as well as a partial sample of unique indicators. The assessment of unique indicators was limited for the sake of conserving employee time from the two organizations.

Table 1. Sequence of Research Activities

Phase	Activity
1	Literature review
2	Site visits (focus groups and interviews) to Hamilton County JFS and Michigan FIA offices
3	Development of draft measures of employee attitudes and perceptions tailored to each organization
4	Management review and editing of survey items, performed separately for each agency
5	Development of Internet-based survey questionnaires
6	Internet-based administration of surveys for employees and supervisors at each agency
7	Analysis of survey results
8	Development of potential indicators of work outcomes
9	Collection of archival data on work outcomes
10	Analysis of work outcome data
11	Compilation of results

Hamilton County JFS

Hamilton County JFS agreed to a comprehensive assessment of the PFP program. They also wanted buy-in from the union and its representatives were allowed to review and comment on a preliminary version of the survey questions. However, the union did not determine the survey design or content. All parts of the survey design were based on data gathered from interviews and focus groups with Hamilton County JFS employees.

Several years before this study, an attitude survey was distributed by an intern who was collecting data for a school research project. Results from several items in that survey were used as a baseline for comparison of changes in the perception of PFP over time.

JFS Outcome Measures

In addition to survey participation by employees and supervisors, Hamilton County provided historical records on the performance of Children's Services for the previous 10 years. The outcome data were regularly collected and monitored by the management of JFS to assess the county's compliance with national standards that were established by the Child and Family Services Review (CFSR) Program. The U.S. Department of Health and Human Services used the CFSR standards to determine the Child Protection Oversight and Evaluation (CPOE) Outcome Indicators for local government agencies. Those criteria determine each agency's degree of compliance with the CFSR National Standards. JFS records were in a summary form (no data on the performance of individual employees were available) and were reported on a semi-annual basis.

Michigan

An important concern among employees and managers at Michigan FIA was time pressure. Employees felt overworked with high caseloads and hiring shortages. The time allowed for participation by employees and supervisors in the survey was required to be 10 minutes or less. It was anticipated that participation in the survey would be lower if the survey is too long.

Survey Research Design

A field research methodology was applied for the collection and analysis of quantitative data to assess the effectiveness of best practices programs at each agency. Because the total sample represented two agencies which had different programs for evaluation, each agency served jointly as an experimental group and as a control group for different portions of the evaluation.

For purposes of allowing statistical comparisons for testing research hypotheses, Michigan served as the control group in performance management practices, and Hamilton County served as the control group in employee selection and hiring procedures. Data from Michigan on the results of hiring practices were taken as experimental results, and data from Hamilton County on the results from the Pay for Performance program were taken served as the experimental results on performance management.

A graphical illustration of the research design is provided in Figure 1. Each agency introduced an innovative program (X): Michigan FIA's program focused on hiring (X_h) and the program in Hamilton County JFS focused on pay for performance (X_p). Both agencies continued their traditional practices in most other respects, although that was experimentally uncontrolled (U). FIA traditional practices of particular interest were in performance management (U_p) and the JFS traditional practices were for hiring practices (U_h). Both the experimental and the uncontrolled traditional practices continued simultaneously at FIA ($U_p X_h$) and JFS ($X_p U_h$) since the late 1990s through the time of this current study.

In the assessment of innovative hiring practices introduced in FIA through the CCHP program, Hamilton County provided observations of outcomes ($O_{h,t}$) that were taken as representative of traditional public sector hiring procedures. Observations from Michigan on the results from CCHP were the experimental data (O_h) on innovative hiring practices. It was hypothesized that the general direction of outcomes from the experimental observations on hiring practices would be more favorable than the observations from traditional practices ($O_h > O_{h,t}$).

Figure 1. Illustration of the Evaluation Research Design

Site	Activities	Measures	Hypotheses
Hamilton County JFS	$(X_p U_h)$	O_p	$O_p > O_{p,t}$
		$O_{h,t}$	
Michigan FIA	$(U_p X_h)$	$O_{p,t}$	$O_h > O_{h,t}$
		O_h	

The observations of the outcomes from performance planning and management practices were collected as field experimental data (O_p) on FIA's innovative PFP program. Observations from FIA on performance management practices were taken to be representative of traditional practices in the public sector and, thus, they served as the control group ($O_{p,t}$). It was hypothesized that the general direction of outcomes from the field experimental observations on performance planning and management practices would be more favorable than the observations from traditional practices ($O_p > O_{p,t}$).

Survey Instrumentation

Four survey questionnaires were developed for the collection of quantitative data. Two survey questionnaires were developed for each site (Hamilton County JFS and Michigan FIA), one each for employees and supervisors. The questionnaires for supervisors were intended to capture perspectives that were different from those of employees on management practices and program outcomes at each site, reflecting differences in their role responsibilities.

Factors for measurement were derived primarily from the findings of interviews and focus group discussions that were conducted during site visits. One or more items that measured each factor were developed for survey participants' responses to the questionnaires.

Practical considerations at each site influenced the number of items and factors contained in their respective questionnaires. Officials at Michigan FIA expressed a desire to contain the time and administrative requirements for employee participation and efforts were made to keep both of the Michigan questionnaires as short as possible. Hamilton County JFS was somewhat less concerned about the time requirements of participation and expressed more interest in a thorough examination of the PFP program's outcomes. Therefore, the two questionnaires developed for Hamilton County contained more factors and items than the ones developed for Michigan.

A total of 25 factors were identified for the assessment outcomes from the two programs. Those factors are listed in Table 2, along with the number of items in each factor that was included in survey questionnaires for supervisors and employees at Hamilton County and Michigan. In addition to factors related to best practices (hiring practices and performance management), a small number of items were included in all questionnaires to assess additional aspects of organizational climate and effectiveness, such as training, productivity, and work stress.

Table 2. Factors and Number of Items in Survey Questionnaires at Each Site

Factor	Hamilton Co. JFS Employees	Hamilton Co. JFS Supervisors	Michigan FIA Employees	Michigan FIA Supervisors
Hiring Practices	2	8	5	10
CCHP Features	-	-	-	3
Job Fit	3	3	4	2
Overall Job Satisfaction	1	1	1	-
PFP Overall	4	5	4	2
PFP Impact	-	8	-	-
PFP Fairness	3	3	-	-
PFP Effort-Outcome Linkage	4	4	-	-
PFP Elements	2	4	-	-
Performance Feedback	3	2	-	-
Last Performance Evaluation	3	3	-	-
PFP Program Clarity	6	5	-	-
PFP Reward Value	2	-	-	-
PFP Role Clarity	4	-	-	-
PFP Influence Participation	-	1	-	-
PFP Voice Participation	4	4	-	-
Productivity	4	6	2	1
Staffing	-	-	-	2
Staff Quality	-	-	-	3

Factor	Hamilton Co. JFS Employees	Hamilton Co. JFS Supervisors	Michigan FIA Employees	Michigan FIA Supervisors
Stress	1	1	-	-
The Survey	2	2	-	-
Training	3	5	3	2
Turnover	1	3	6	5
Workload	2	2	2	-
Demographics	7	7	6	7
Compensation Practices	-	1	-	-
Other	2	-	1	1
Total	62	88	34	38

To allow comparisons between sites, items used to measure each site's best practices were included whenever possible in the survey questionnaires at their respective control group sites. Thus, the two items on hiring practices that were included in the Hamilton County Employee Survey were included among the eight items on hiring practices in the Hamilton County Supervisor Survey, among the five items on hiring practices in the Michigan Employee Survey, and among the 10 items on hiring practices in the Michigan Supervisor Survey.

Survey Sample

The employees and supervisors who participated in this study were currently employed by Hamilton County JFS and Michigan FIA. All participation at both agencies was voluntary and anonymous, and no efforts were made to track participation by individuals. Each agency allowed three weeks for participation, and sent reminders to encourage participation after the second week.

Response rate. A total of 1,096 employees and supervisors participated in the surveys by completing a questionnaire. Of those, 175 (16%) were from Hamilton County JFS and 921 (84%) were from Michigan FIA. The participants from Hamilton County JFS represented a response rate of 23.7% of the 738 employees at that agency who were invited to participate in the survey. The sample of 921 employees and supervisors from Michigan FIA was 36.7% of the 2507 employees at that agency who were invited to participate in the survey.

Approximately four-fifths (81.9%) of the total sample was employed by Michigan FIA, and Michigan provided substantially higher participation by supervisors and managers. All of the respondents from Hamilton County JFS came from that agency's Children's Services Division. A summary of participation by supervisors and employees from each site is shown in Table 3 (page 20).

Table 3. Responses by Employees and Supervisors

Participants	Hamilton County		Michigan		Total	
	<i>N</i>	% of Total	<i>N</i>	% of Total	<i>N</i>	% of Total
Employees	146	15.6	691	61.4	837	77.0
Supervisors	29	2.6	230	20.4	259	23.0
Total	175	18.1	921	81.9	1,096	100.0

Gender. Approximately three quarters of the total survey sample was comprised of women. Data on the gender of survey participants is provided in Table 4 below. The difference between the total number of men and women in Table 4, $N = 1,081$, and the total number of survey participants, $N = 1,096$, reflected the number of participants who did not respond to the questionnaire item on gender.

The Michigan FIA workforce population consisted of 546 men (21.78% of the total FIA workforce) and 1,961 women (78.22% of the total). A total of 906 survey participants from Michigan FIA indicated their gender in response to an item on the questionnaire. Of those, 241 (26.60%) were male and 665 (73.40%) were female. From these comparisons, it appeared that the Michigan FIA survey sample was representative of the gender composition of the Michigan FIA population.

The JFS survey sample consisted of 34 (19.43%) men and 141 (80.57%) women. Those proportions closely approximated the composition of the JFS employee population which was comprised of 284 (19.76%) men and 1,153 (80.24%) women at the time of this study.

Table 4. Gender of Survey Participants

Gender		Survey Site		Total
		Hamilton County	Michigan	
Male	<i>N</i>	34	241	275
	% within Site	19.43	26.60	25.44
	% of Total	3.15	22.29	25.44
Female	<i>N</i>	141	665	806
	% within Site	80.57	73.40	74.56
	% of Total	13.04	61.52	74.56
Total	<i>N</i>	175	906	1,081
	% within Site	100.00	100.00	100.00
	% of Total	16.19	83.81	100.00

Race and ethnicity. Table 5 (page 22) shows the composition in race and ethnicity among the sample of participants. A total of 1,059 participants responded to the item on race and ethnicity, while 37 people chose to not respond. About three quarters of the total sample (74.3%) were Caucasian, and most of the remainder was comprised of African Americans/Blacks (22.5%) and Hispanics (1.8%). Asian Americans and Pacific Islanders and Native Americans/Eskimos each accounted for less than 1% of the survey sample. On the whole, the sample from Michigan FIA appeared to have slightly higher proportions of Asian Americans, Hispanics, and Native Americans than the sample from Hamilton County JFS.

The ethnicity of the Michigan FIA sample was predominately Caucasian (77.03%), with most of the remainder comprised of African Americans (19.59%) and Hispanics (2.03%). Those proportions approximated the Michigan FIA employee population which consisted of 65.42% Caucasian, 31.31% African American, and 2.11% Hispanics. Asian Americans and Native Americans each comprised less than 1% of the survey sample and the Michigan FIA employee population. Slightly over 97% of the Hamilton County JFS sample consisted of Caucasians (60.23%) and African Americans (37.43%).

Length of Service. The mean length of service for their respective agencies was 12.8 years ($S = 9.92$, $N = 1,081$) for the full sample of participants, with 15 people choosing to not indicate their length of service. The mean length of service for Hamilton County was 7.8 years ($s = 6.71$, $n = 172$) and the mean length of service for Michigan was 13.7 years ($s = 10.15$, $n = 909$).

Table 5. Race and Ethnicity of Survey Participants

Race / Ethnicity	Survey Site		Total
		Hamilton County	Michigan
Asian American / Pacific Islander	<i>N</i>	-	7
	% Within Site	-	0.79
	% of Total	-	0.66
African American / Black	<i>N</i>	64	174
	% Within Site	37.43	19.59
	% of Total	6.04	16.43
Caucasian / White	<i>N</i>	103	684
	% Within Site	60.23	77.03
	% of Total	9.73	64.59
Hispanic	<i>N</i>	1	18
	% Within Site	0.58	2.03
	% of Total	0.09	1.70
Native American / Eskimo	<i>N</i>	3	5
	% Within Site	1.75	0.56
	% of Total	0.28	0.47
Total	<i>N</i>	171	888
	% Within Site	100.00	100.00
	% of Total	16.15	83.85

Results

Data from the four attitude surveys were analyzed separately from the Hamilton County JFS outcome measures. Results from the surveys will be presented first, followed by the results from the analyses of outcome measures.

Attitude Surveys

All data from the attitude surveys were analyzed by statistical software to compute descriptive statistics on the sample and parametric statistics for tests of research hypotheses. Summary results from the Hamilton County JFS Employee Survey and Supervisor Survey are presented in Appendices F and G, respectively. Summary results from the Michigan FIA Employee Survey and Supervisory Survey are presented in Appendices H and I, respectively.

Directional Recoding

The research hypotheses designed to assess the effectiveness of the “best practices” predicted specific changes in the two participating agencies resulting from their respective programs. To test those hypotheses, survey data were directionally recoded to make “more favorable” and “less favorable” response options uniform for all items. The most favorable responses were recoded so that they all had a scale value of 5 and the least favorable responses were recoded to have a scale value of 1. In this manner, all responses to directionally scored items were made consistent. For all items used to test research hypotheses, higher scale values indicated “more favorable” responses and lower scale values indicated “less favorable” responses.

An illustration of the recoding process is presented in Table 6. For the item, “Most new employees receive adequate training for their jobs,” the original response scale had a value of 1 for *Strongly Agree*, which was the most favorable possible response to the item. After recoding, a response of *Strongly Agree* received a scale value of 5, and higher scale values indicated more favorable responses to that question.

Table 6. Illustration of Recoding Process

Coding	Item	Scale Value				
		1	2	3	4	5
Original	Most new employees receive adequate training for their jobs.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Recoded	Most new employees receive adequate training	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

Coding	Item	Scale Value				
		1	2	3	4	5
	for their jobs.					
Original	My job requires more than one person can do.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
Recoded	My job requires more than one person can do.	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

The next question in Table 6 originally was a reversely-coded item: “My job requires more than one person can do.” A response of 1 to the original survey item was *Strongly Agree*. That was the least favorable response available, and a response of 5, for *Strongly Disagree*, was the most favorable. No changes were made to the scores of that item and other items that were reverse-coded in their original version because higher scores on those items already indicated more favorable responses.

Program Effectiveness

A total of 30 items allowed for tests of research hypotheses. Seventeen items were included in the employee surveys at Hamilton County JFS and Michigan FIA. Seven items were included in the supervisor surveys in Hamilton County JFS and Michigan FIA, and six items were included that allowed for comparisons over time at Hamilton County JFS. Analyses of changes over time were performed to assess whether improvements initiated in the PFP program at Hamilton County JFS resulted in changes in employee perceptions of the program.

A list of items used for comparisons between Hamilton County JFS, Michigan FIA, and over time at Hamilton County JFS are listed in Table 7. Each item in Table 7 corresponds to one of the research hypotheses that guided the design of this study.

Table 7. Comparative Items Common to Two Surveys

Survey	Hypothesis	Item
Employee	1	How satisfied are you with the process by which your job performance is evaluated?
Employee	2	The quality of work done in my section is excellent.
Employee	3	My coworkers are competent in performing their jobs.
Employee	4	How satisfied are you with the training you received for your present job?
Employee	5	Employees in my work section are rewarded for their effort.
Employee	6	To what extent does your section deliver better service to consumers now than five years ago?
Employee	7	Employee turnover in my unit causes too much work for the rest of us.
Employee	8	My job requires more than one person can do.
Employee	9	To what extent is the work distributed fairly to the people in your section?
Employee	10	When I was new on the job, I had to learn too many things on my own.
Employee	11	Most new employees receive adequate training for their jobs.
Employee	12	When I first started, the manner in which I was hired treated me with dignity and respect.
Employee	13	To what extent are your coworkers well qualified for their jobs?
Employee	14	My job makes good use of my skills and abilities.
Employee	15	I like the kind of work I do.
Employee	16	To what extent did you know enough about the nature of your job before you were first hired?
Employee	17	Overall, how satisfied are you with your job?
Supervisor	18	To what extent have formal performance reviews helped improve the productivity and effectiveness of your subordinates?
Supervisor	19	How satisfied are you with the training and preparation you received for your role in the performance planning and assessment process?
Supervisor	20	I know that I will get well-qualified people from HR when I need to hire new employees.
Supervisor	21	I am allowed enough input into the hiring decisions for my work unit.
Supervisor	22	The new employees we hire today are better than they were five years ago.
Supervisor	23	To what extent are newly-hired employees adequately trained by the time they

Survey	Hypothesis	Item
		begin working in your unit?
Supervisor	24	How satisfied are you with your agency's current procedures for recruiting, screening and hiring new employees?
HC Improvements	25	The current evaluation system gives everyone an equal chance to success or fail
HC Improvements	26	My supervisor regularly reviews my progress on work objectives during the evaluation period.
HC Improvements	27	The merit and bonus payments I receive motivate me to perform better on my job
HC Improvements	28	I understand how my supervisor divides bonus money in my work unit
HC Improvements	29	I am more likely to remain employed with JFS because of the pay for performance system
HC Improvements	30	Overall, the pay for performance system is an effective tool in compensating me for the work I do

Employee Survey Responses

A multivariate analysis of variance (MANOVA) was performed on the items that measured employee perceptions and opinions at both agencies. The purpose of that analysis was to determine whether composite differences existed between employee responses from Hamilton County JFS and Michigan FIA. The results from that analysis were highly statistically significant: $F = 5.20$ ($df = 18, 526$), $p < .01$. Therefore, it was concluded that employees at the two agencies responded differently to the items common to both employee surveys. The total proportion of variance accounted for by differences in the responses from both agencies was indicated by the square of a canonical correlation (r_c^2) that equaled 0.15.

A series of univariate analysis of variance (ANOVAs) was then performed on the data for each of the 17 items that were included in employee surveys at Hamilton County JFS and Michigan FIA. Results from the ANOVAs were statistically significant ($p < .05$) for 10 of the 17 hypotheses. Table 8 lists the items and the research hypothesis that each item was designed to test. Table 8 also provides the means of responses to the items by the employees from each agency, the statistical probability of the results from the ANOVA, the Pearson correlation (r) between each item and the survey site (JFS or FIA), and the proportion of total variance accounted for (r^2) by each item.

Table 8. Results from Analysis of Variance for Items Common to Employee Surveys

Hyp	Item	Agency	N	Mean	S	p	r	r ²
1	How satisfied are you with the process by which your job performance is evaluated?	Hamilton County	144	2.83	1.13	< .01	0.10	0.01
		Michigan	687	3.11	1.04			
		Total	831	3.06	1.06			
2	The quality of work done in my section is excellent.	Hamilton County	141	3.84	0.95	< .01	0.15	0.02
		Michigan	686	3.46	0.95			
		Total	827	3.52	0.96			
3	My coworkers are competent in performing their jobs.	Hamilton County	142	3.97	0.91	< .01	0.11	0.01
		Michigan	684	3.71	0.89			
		Total	826	3.76	0.90			
4	How satisfied are you with the training you received for your present job?	Hamilton County	145	3.23	1.05	ns		
		Michigan	685	3.17	1.04			
		Total	830	3.18	1.04			
5	Employees in my work section are rewarded for their effort.	Hamilton County	140	2.82	1.24	< .05	0.08	0.01
		Michigan	686	2.58	1.12			
		Total	826	2.62	1.14			
6	To what extent does your section deliver better service to consumers now than five years ago?	Hamilton County	92	3.36	1.18	< .01	0.19	0.04
		Michigan	468	2.72	1.21			
		Total	560	2.82	1.23			
7	Employee turnover in my unit causes too much work for the rest of us.	Hamilton County	142	1.96	1.10	< .05	0.08	0.01
		Michigan	690	2.18	1.10			
		Total	832	2.14	1.10			
8	My job requires more than one person can do.	Hamilton County	141	2.05	1.06	ns		
		Michigan	689	1.99	1.19			
		Total	830	2.00	1.17			
9	To what extent is the work distributed fairly to the people in your section?	Hamilton County	145	3.06	1.08	ns		
		Michigan	685	3.08	1.08			
		Total	830	3.07	1.08			
10	When I was new on the job, I had to learn too many things on my own.	Hamilton County	141	2.64	1.17	< .01	0.10	0.01
		Michigan	686	2.35	1.10			
		Total	827	2.40	1.12			
11	Most new employees receive adequate training for their jobs.	Hamilton County	142	3.07	1.05	< .01	0.12	0.02
		Michigan	689	2.70	1.13			
		Total	831	2.76	1.12			
12	When I first started, the	Hamilton County	142	3.96	0.88	ns		

Hyp	Item	Agency	N	Mean	S	p	r	r ²
	manner in which I was hired treated me with dignity and respect.	Michigan	688	3.93	0.89			
		Total	830	3.94	0.89			
13	To what extent are your coworkers well qualified for their jobs?	Hamilton County	145	3.66	0.88	ns		
		Michigan	686	3.66	0.86			
		Total	831	3.66	0.86			
14	My job makes good use of my skills and abilities.	Hamilton County	142	3.65	1.11	ns		
		Michigan	688	3.69	1.09			
		Total	830	3.68	1.09			
15	I like the kind of work I do.	Hamilton County	142	3.87	0.95	< .05	0.07	0.01
		Michigan	685	4.05	0.88			
		Total	827	4.02	0.89			
16	To what extent did you know enough about the nature of your job before you were first hired?	Hamilton County	145	2.85	1.06	ns		
		Michigan	687	2.70	1.13			
		Total	832	2.72	1.12			
17	Overall, how satisfied are you with your job?	Hamilton County	145	3.27	1.00	< .05	0.07	0.01
		Michigan	687	3.48	1.08			
		Total	832	3.44	1.07			

The first six hypotheses made predictions about outcomes from the PFP program at Hamilton County JFS. Five of the JFS hypotheses were directional and one was exploratory. The next 10 hypotheses focused on outcomes from the CCHP program at Michigan FIA. Eight of those hypotheses were directional and two were exploratory. A final non-directional hypothesis explored whether a difference in employees' overall job satisfaction might have been produced by either program.

Hamilton County JFS Employee Opinions

Hypothesis 1 predicted that employees at Hamilton County JFS would be more satisfied than employees elsewhere with the overall process by which their job performance was evaluated. Results from an ANOVA performed to test that hypothesis were highly statistically significant: $F = 8.34$ ($df = 1, 830$), $p < .01$. However, the means from employees at the two agencies were in the direction opposite from that predicted. Employees at Michigan FIA were more satisfied with the process by which their performance was evaluated ($M = 3.11$, $S = 1.04$) than were the employees at Hamilton County JFS ($M = 2.83$, $S = 1.13$). Based on these results, the first hypothesis was rejected.

The second research hypothesis predicted that employees' perceptions of work quality would be higher at Hamilton County JFS than elsewhere. Results from the ANOVA that tested that hypothesis were highly statistically significant: $F = 18.51$ ($df = 1, 826$), $p < .01$. The difference between the means from each agency was in the direction predicted: Hamilton County JFS $M = 3.84$ ($S = 0.95$), and Michigan FIA $M = 3.46$ ($S = 0.95$). Therefore, the second hypothesis was accepted and it was concluded that work quality was seen by employees as being higher at Hamilton County JFS.

Hypothesis 3 predicted that the competence of coworkers would be regarded higher by employees at Hamilton County JFS than elsewhere. Results from the ANOVA that tested that hypothesis were highly statistically significant: $F = 9.99$ ($df = 1, 825$), $p < .01$. The mean of responses from Hamilton County JFS ($M = 3.97$, $S = 0.91$) was higher than the mean from Michigan FIA ($M = 3.71$, $S = 0.89$) and, therefore, the third hypothesis was accepted. It was concluded that JFS employees saw their coworkers as more competent in their jobs than did FIA employees.

The fourth hypothesis investigated whether employees would regard the effectiveness of their training as better at Hamilton County JFS than at Michigan FIA. The ANOVA performed to test that hypothesis was not statistically significant ($p > .05$). Therefore, no differences in training effectiveness were found for Hypothesis 4.

Hypothesis 5 predicted that employees would report that they were rewarded for their work effort under the PFP program at Hamilton County JFS more than under traditional performance management programs. Results from an ANOVA that tested that hypothesis were statistically significant: $F = 5.22$ ($df = 1, 825$), $p < .01$. The mean of responses from Hamilton County JFS (2.82, $S = 1.22$) was higher than the mean from Michigan FIA (2.58, $S = 1.12$). Therefore, the fifth hypothesis was accepted and it was concluded that employees were rewarded for their work effort more at JFS than at FIA.

Hypothesis 6 predicted that employees would see the quality of service as improving more from working under the PFP program at Hamilton County JFS than under a traditional performance management program. Results from an ANOVA to test that prediction were highly statistically significant: $F = 21.88$ ($df = 1, 559$), $p < .01$. The difference between the mean of responses from the two agencies was in the predicted direction: Hamilton County JFS $M = 3.36$ ($S = 1.18$) and Michigan FIA $M = 2.72$ ($S = 1.21$). Therefore, Hypothesis 6 was accepted. It was concluded that employees saw greater improvement in service quality at JFS than at FIA over the past five years.

Michigan FIA Employee Opinions

Hypothesis 7 was non-directional and it investigated whether differences existed in the perceptions of employees at the two agencies over disruptions caused by employee turnover. Results from an ANOVA found statistically significant differences between the mean responses of the two agencies: $F = 4.74$ ($df = 1, 831$), $p < .05$. JFS employees reported that employee turnover was more of a problem ($M = 1.96$, $S = 1.10$) than did FIA employees ($M = 2.18$, $S = 1.10$). Therefore, it was concluded that employee turnover was seen as being more of a disruption at JFS than it was at FIA.

Hypotheses 8 and 9 investigated differences in perceptions of work load and work distribution by employees at Michigan FIA and Hamilton County JFS. Results from two ANOVAs performed to test each of those hypotheses were not statistically significant ($p > .05$). Therefore, it was concluded that no real differences existed between JFS and FIA in employee perceptions of workload and work distribution.

The tenth hypothesis predicted that the training received by new employees would be regarded more favorably at Michigan FIA than elsewhere. Results from an ANOVA were statistically significant ($F = 7.77$, $df = 1$, 826 , $p < .01$). However, the direction of the difference between the agency means was opposite from the predicted direction: the mean from Hamilton County JFS (2.64 , $S = 1.17$) was more favorable than the mean from Michigan FIA (2.35 , $S = 1.10$). It was thought that employees' length of service might influence their perception of training when they were new on the job. To further investigate, employees' years with the agency (FIA and JFS) was dichotomized ("5 Years or Less" versus "Greater than 5 Years"), the main effect for length of service and the interaction between length of service and agency both failed to reach statistical significance ($p > .05$). Based on these results, Hypothesis 10 was rejected.

The eleventh hypothesis predicted that new employees received better training for their jobs from the CWI, linked to Michigan FIA's CCHP, than elsewhere. Like the results found for Hypothesis 10, the results for Hypothesis 11 were statistically significant but in the opposite direction from the prediction: $F = 12.98$ ($df = 1$, 830), $p < .01$; $M_{JFS} = 3.07$ ($S_{JFS} = 1.05$), $M_{FIA} = 2.70$ ($S_{FIA} = 1.13$). Based on these findings, Hypothesis 11 was rejected.

Hypotheses 12 and 13 predicted specific differences in employee perceptions based on benefits from the standardized interviewing process at Michigan FIA's CCHP program. ANOVAs performed to test those hypotheses were not statistically significant ($p > .05$). Therefore, it was concluded that employee perceptions did not differ because of the standardized interviewing process at CCHP.

Hypotheses 14 and 15 primarily concerned improvements in job fit at Michigan FIA. Those hypotheses predicted that FIA employees would report greater congruence between their skills and interests and their job requirements, and receive more intrinsic rewards from their jobs, than employees elsewhere. ANOVAs were performed to test each prediction. The results for Hypothesis 14 were not statistically significant ($p > .05$). Therefore, that hypothesis was rejected. The results for Hypothesis 15, however, were statistically significant: $F = 4.53$ ($df = 1$, 826), $p < .05$. The mean was 4.05 ($S = 0.88$) for FIA and the mean for JFS was 3.87 ($S = 0.95$). Based on these findings, Hypothesis 15 was accepted and it was concluded that FIA employees liked doing their kind of work more than did employees at JFS.

Hypothesis 16 was a non-directional investigation of whether employees at JFS and FIA differed in the realistic information they received before accepting employment and being placed in a job. Results from an ANOVA to test that hypothesis were not statistically significant: $F = 2.18$ ($df = 1$, 831), $p > .05$. Therefore, Hypothesis 16 was rejected and it was concluded that no differences existed between the two agencies in perceptions of realistic job information before hire.

Both Programs

The final hypothesis regarding employee perceptions in both programs was a non-directional exploration of whether either the PFP or the CCHP innovations were identifiably better at improving overall job satisfaction. Results from an ANOVA that tested that hypothesis were statistically significant: $F = 4.52$ ($df = 831$), $p < .05$. The mean for FIA (3.48, $S = 1.08$) was higher than the mean for JFS (3.27, $S = 1.00$). Therefore, it was concluded employees' overall job satisfaction was higher at FIA than at JFS.

Supervisor Opinions

Analysis of supervisor responses from both agencies followed the same sequence as described for the employee responses. A multivariate analysis of variance (MANOVA) was performed on the items that measured supervisor perceptions and opinions at both agencies. The purpose of that analysis was to determine whether composite differences existed between supervisor responses from Hamilton County JFS and Michigan FIA. The results from that analysis were highly statistically significant: $F = 13.24$ ($df = 7, 229$), $p < .01$. Therefore, it was concluded that supervisors at the two agencies responded differently to the items common to both supervisor surveys. The total proportion of variance accounted for by differences in the responses from both agencies was indicated by the square of a canonical correlation (r_c^2) that equaled 0.29.

A series of univariate analysis of variance (ANOVAs) was then performed on the data for each of the seven items that were included in supervisor surveys at Hamilton County JFS and Michigan FIA. Results from five of those ANOVA were statistically significant ($p < .05$). The seven items are listed in Table 9 with the research hypothesis that each item was designed to test. Table 9 also provides the means of responses to items by supervisors from each agency, the statistical probability of the results from the analysis of variance, the Pearson correlation (r) and the proportion of total variance (r^2) accounted for by each item.

Table 9. Results from Analysis of Variance for Items Common to Supervisor Surveys

Hyp	Item	Agency	<i>N</i>	Mean	<i>S</i>	<i>p</i>	<i>r</i>	<i>r</i> ²
18	To what extent have formal performance reviews helped improve the productivity and effectiveness of your subordinates?	Hamilton County	29	2.34	0.94	ns		
		Michigan	226	2.10	0.96			
		Total	255	2.13	0.96			
19	How satisfied are you with the training and preparation you received for your role in the performance planning and assessment process?	Hamilton County	29	2.66	0.90	< .05	0.14	0.02
		Michigan	226	3.05	0.89			
		Total	255	3.00	0.89			
20	I know that I will get well-qualified people from HR when I need to hire new employees.	Hamilton County	29	2.10	0.77	< .01	0.33	0.11
		Michigan	227	3.01	0.83			
		Total	256	2.91	0.87			
21	I am allowed enough input into the hiring decisions for my work unit.	Hamilton County	29	3.41	1.12	ns		
		Michigan	227	3.21	1.22			
		Total	256	3.23	1.21			
22	The new employees we hire today are better than they were five years ago.	Hamilton County	28	2.21	0.83	< .01	0.20	0.04
		Michigan	215	2.83	0.95			
		Total	243	2.76	0.96			
23	To what extent are newly-hired employees adequately trained by the time they begin working in your unit?	Hamilton County	29	3.00	0.85	< .05	0.14	0.02
		Michigan	224	2.65	0.81			
		Total	253	2.69	0.82			
24	How satisfied are you with your agency's current procedures for recruiting, screening and hiring new employees?	Hamilton County	29	1.90	0.90	< .01	0.37	0.14
		Michigan	227	3.06	0.93			
		Total	256	2.93	1.00			

Hypothesis 18 predicted that Hamilton County JFS supervisors, more so than Michigan FIA supervisors, would credit the performance review process for improvements in the productivity and effectiveness of their employees. While the difference between the means was in the direction predicted, results from an ANOVA that tested the hypothesis were not statistically significant: $F = 1.71$ ($df = 1, 254$), $p > .05$. Based on these findings, Hypothesis 18 was rejected.

Hypothesis 19 predicted that supervisors at Hamilton County JFS would be less satisfied than supervisors elsewhere with their training and preparation for the performance management program. Results from an ANOVA were statistically significant: $F = 5.05$ ($df = 1, 254$), $p < .05$. The mean from Hamilton County JFS (2.66, $S = 0.90$) was lower than the mean from Michigan FIA (3.05, $S = .89$). These results were consistent with the predictions from Hypothesis 19 and, therefore, that hypothesis was accepted. It was concluded that FIA supervisors were more satisfied than JFS supervisors with their training and preparation for their role in the performance planning and assessment process.

Hypothesis 20 predicted that supervisors at Michigan FIA would be more confident in the services they received from the CCHP than would supervisors at Hamilton County JFS who worked under a traditional civil service program. An ANOVA was performed to test that prediction and results were highly statistically significant: $F = 31.49$ ($df = 1, 255$), $p < .01$. The mean from Hamilton County JFS was lower (2.10, $S = 0.77$) than the mean from Michigan FIA (3.01, $S = 0.83$). Therefore, Hypothesis 20 was accepted. It was concluded that FIA supervisors had more confidence in the qualifications of their new hires than did the JFS supervisors.

Hypothesis 21 was based on feedback from focus groups of Michigan FIA supervisors. It predicted that supervisors at Michigan FIA wanted more input into the decisions on hiring new employees. The difference between the means was in the direction hypothesized, but results from the ANOVA were not statistically significant: $F = 0.72$ ($df = 1, 255$), $p < .01$. Based on these results, Hypothesis 21 was rejected, and it was concluded that the supervisors did not differ in the input they were allowed in hiring decisions.

Hypothesis 22 predicted that Michigan FIA supervisors would recognize greater improvement in the quality of their new hires over the past 5 years as a result of their standardized CCHP practices. Results from an ANOVA that tested that prediction were highly statistically significant: $F = 10.54$ ($df = 1, 242$), $p < .01$. The mean from Michigan FIA (2.83, $S = 0.95$) was higher than the mean from Hamilton County (2.21, $S = 0.83$). Therefore, Hypothesis 22 was accepted. It was concluded that FIA supervisors saw greater improvement in their agency's quality of new employees than did the JFS supervisors.

Hypothesis 23 was concerned more with Michigan FIA's training institute more than with CCHP. It predicted that Michigan FIA supervisors would find their employees better trained than would supervisors elsewhere. Results from an ANOVA were statistically significant: $F = 4.68$ ($df = 1, 252$), $p < .05$. The mean from JFS supervisors was 3.00 ($S = 0.85$) and the mean from FIA was 2.65 ($S = 0.81$). That difference was opposite from what was predicted and, therefore, Hypothesis 23 was rejected.

The final prediction about supervisor responses, Hypothesis 24, said that Michigan FIA supervisors would be more satisfied with the CCHP procedures for recruiting, screening, and hiring new employees than would supervisors elsewhere. Results from an ANOVA were highly statistically significant: $F = 40.19$ ($df = 1, 255$), $p < .01$. Michigan FIA supervisors reported over one scale-point higher satisfaction ($M = 3.06$, $S = 0.93$) than Hamilton County JFS supervisors ($M = 1.90$, $S = 0.90$). Based on these results, Hypothesis 24 was accepted. It was concluded that FIA supervisors were more satisfied with their agency's procedures for recruiting, screening, and hiring than were JFS supervisors.

Changes in Opinions at Hamilton County JFS

The final set of predictions about the outcome from the surveys focused on changes over time in the perceptions of employees at Hamilton County JFS. Initiatives undertaken at JFS were intended to improve the clarity of MWOs, employee understanding of the program, and employee understanding of the manner in which merit increases and bonuses were determined. All of the hypotheses related to those initiatives were non-directional about the outcomes in employee opinions.

Non-directional t tests were performed on the items included in employee surveys during both the Year 2000 and the current study. Results from those t tests are summarized in Table 10, and they include the sample sizes, means, and standard deviations from both surveys. All of the t tests failed to reach statistical significance ($df = 650$, $p > .05$). When the responses of supervisors were included with those of employees in the 2004 survey, the t test results remained less than statistically significant. Therefore, Hypotheses 25 through 30 were rejected. It was concluded that no real differences were found between the survey results from the Year 2000 and the present study.

Table 10. Results from Items Common to Year 2000 and 2004 Surveys

Hyp	Item	2000 Survey			2004 Survey			t_{04-00}
		N_{00}	M_{00}	S_{00}	N_{04}	M_{04}	S_{04}	
25	The current evaluation system gives everyone an equal chance to success or fail	512	2.64	1.16	141	2.71	1.19	0.06
26	My supervisor regularly reviews my progress on work objectives during the evaluation period.	508	3.14	1.16	141	3.64	1.11	0.44
27	The merit and bonus payments I receive motivate me to perform better on my job	508	2.62	1.27	141	2.62	1.22	0.00
28	I understand how my supervisor divides bonus money in my work unit	510	2.45	1.15	142	2.61	1.18	0.14
29	I am more likely to remain employed with JFS because of the pay for performance system	510	2.42	1.06	142	2.27	1.07	-0.14
30	Overall, the pay for performance system is an effective tool in compensating me for the work I do	510	2.44	1.16	142	2.42	1.16	-0.02

Outcome Measures

The primary methodology selected for the analysis of outcomes was based on statistical process control (SPC) developed by Shewhart & Deming (1939). More traditional statistical tests of scientific hypotheses were performed as follow-up analyses on outcomes that were found to be derived from stable work processes.

The statistics of SPC were developed for the purposes of quality control in all forms of work processes that manufacture products or provide services. In the latter sense, SPC is easily applied to the work processes involved in the delivery of human services. Although SPC has been applied extensively to commercial sectors of the U.S., the human and social services sectors are relatively unfamiliar with it. Therefore, an extended discussion will be provided on the application and interpretation of the first few outcome indicators from JFS. The analysis of the subsequent outcome indicators obtained in our sample will follow the same approach but, as will be evident, their results will be mostly the same. Therefore, for the sake of brevity and avoidance of redundancy, the discussion of those results will be much less extensive.

Background

Control charts used in this analysis were originally developed to measure process variation and to aid in efforts to detect the causes of variation when they exceeded quality control standards. In that sense, SPC charts resemble devices that monitor one's heartbeat or pulse (Nelson, 1988), offering a method for deciding when a signal might show evidence of problems in a repetitive process.

The natural variation inherent in any repetitive process is known as process variation, and SPC was used to describe that variation and to assess whether the outcomes allowed for suitable tests of the effects of PFP on the County's performance. Only those work processes that were found to be stable (under statistical control) were accepted for further analysis of research hypotheses.

Control charts were used to conduct analyses that applied SPC techniques. All control charts include a centerline that designates either the process mean or median depending on the scale of measurement, and two indicators of process limits. An upper control limit (UCL) represents the highest value that an observation can normally be expected to reach, and a lower control limit (LCL) designates the lowest value.

In the control charts of SPC, process limits indicate where the great majority of the process measurements tend to be found. If we assume that those measurements approximately follow the normal distribution, which will be the case for randomly sampled data¹, then the process limits are set at three standard deviations (referred to as "3-sigma" in quality control parlance) from the process mean. Thus, the process limits are $\mu \pm 3\sigma$, where μ is the process mean, and σ is the standard deviation of the process variability. When all the points on a control chart are within the traditional 3-sigma control limits and there are no anomalous patterns in the data, the process is in a state of statistical control or, for short, "in control." Otherwise, the data indicate that the process is "out of control" and has been influenced by "special causes" of variation.

The charts used in the following analyses were Individuals and Moving Range charts. Data from JFS were obtained without reference to the number of people or process measures that constituted each data point or observation. All outcome data were accepted as composites of an undetermined number of sources, and thus they were equivalent to individual observations. The standard SPC chart of variability associated with an Individuals Chart is the Moving Range with a subgroup size of two observations between each range.

¹ According to the central limit theorem, random sampling from a distribution of non-normal shape will still yield a sample with a normal distribution.

The Individuals Chart illustrates the points of data collected for each half-year. Although each point or observation might reflect the mean of all several data sources, they were applied in these analyses as if they were composite indicators. Generally, the closer the pattern of individual observations shown in the Individuals Chart approximates the level desired for the process outcome, the better.

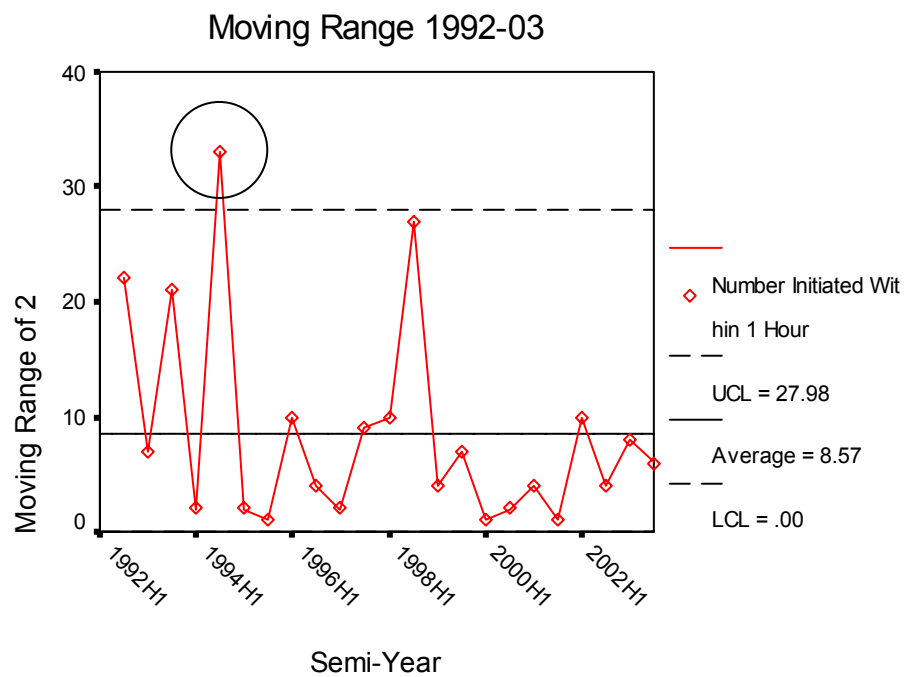
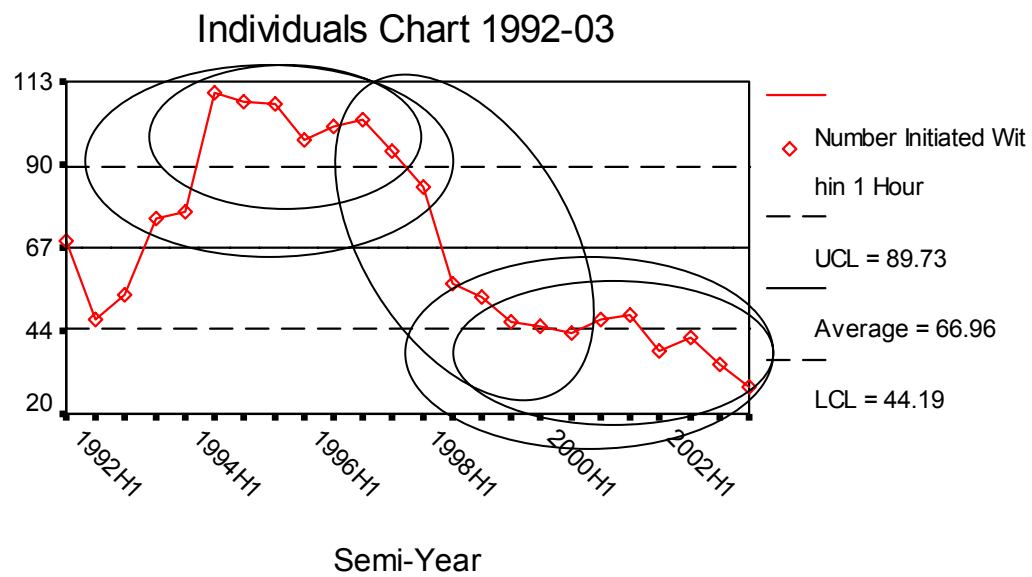
The Moving Range Chart illustrates the variability in the process variation. Assuming random or near-random sampling of outcome measures, the variation in a work process will approximate the normal distribution. Therefore, the rules for interpreting Moving Range Charts are nearly identical to the rules for Individuals Charts. In both charts, lower variability is usually preferred over higher variability since lower variability provides a more consistent level of performance over time.

The techniques of SPC allow for more than a dozen independent tests of process conformance and stability. However, the statistical package used for plotting and analyzing the outcome data (SPSS version 11.0) provided charts only of three standard deviations on either side of the process mean. Therefore, only the first two of those tests (commonly referred to as Test 1 and Test 2) were consistently applied in the present study. Although this approach omitted numerous additional tests that are routinely applied in other settings, it was sufficient for the purposes of this study.

Process Analysis: Investigations Initiated Within One Hour

The first set of outcome data analyzed concerned the number of investigations initiated within one hour of receipt of a complaint of child abuse by JFS. The focus of the SPC analysis was the values and patterns of the individual semi-annual performance measures on the number of investigations initiated. The two control charts of the number of cases investigated within one hour of complaint are shown in Figure 2.

Six areas of the charts in Figure 2 are enclosed in circles: five in the Individuals Chart and one in the Moving Range Chart. Each of those circles indicates the finding of statistical evidence that the one-hour initiation process for investigations was influenced by “special causes” of variation during the years 1992 – 2003. Those special causes were not identifiable in the data. Therefore, the process was defined as being out of statistical control.

Figure 2. Number of Investigations Initiated Within One Hour

Sigma level: 3

Although this first set of data exhibited six indicators of the process being out of control, the actual threshold for determining whether the work process was in or out of statistical control was any single indicator. If only one indicator in either chart reflected a level of probability that was inconsistent with sampling from the normal distribution, then a special cause of variation in the process was concluded. In traditional statistical analysis of the social sciences, this probability is $P = .05$, which means that the chance occurrence of an accepted outcome is 5 or fewer in 100 randomly selected observations.

Results from Test 1. In the Individuals Chart shown in Figure 2, five occurrences were observed that failed Test 1 of control charts – data falling beyond three standard deviations from the mean (or centerline) of the process. The first occurrence is shown as a circle in the upper left-hand side of the Individuals Chart in Figure 2, and it contains one run of seven points that fell beyond the UCL, or three standard deviations higher than the process mean. The second occurrence is shown as a circle in the lower right-hand side of the Individuals Chart in Figure 2. It includes four points that fall on or just below the LCL and, thus, they are three or more standard deviations lower than the process mean.

In a controlled work process, 99.73% of the random fluctuation in work outcomes will fall within three standard deviations from either side of the mean. Therefore, the probability of random fluctuation in a controlled work process falling further than three standard deviations from the mean is $1 - 0.9973$ or about 2.7 chances in one thousand. Conventional SPC criteria reject such a low probability as being the most likely explanation of such occurrences. Instead, the conclusion was drawn that “special causes” (e.g., extraneous factors) were present beyond normal “common causes” of random variation. Therefore, the process is concluded to be out of statistical control based on any one of those noted events.

Results from Test 2. The second test of process control was the presence of nine points in a row on one side of the chart’s centerline. That pattern was identified twice in Figure 2 by circles in the Individuals Chart that contained a sequence of too many points in a row on the same side of the centerline (the process mean). The first instance of a Test 2 violation is shown in Figure 2 by the circle of 10 points at the upper left-hand side of the Individuals Chart. The second occurrence is shown by a circle containing 11 points at the lower right-hand side of the Individuals Chart in Figure 2.

The statistical rationale for Test 2 is as follows. In a random sample taken from a process that was under control, the data plotted on the run chart would reflect only random variation from one point to the next. That is, a single point would have exactly a 50-50 chance of falling on either side of the centerline. Under controlled conditions of random fluctuation, that 50% probability would be the same for each point regardless of the value of the point preceding it.

Consecutive probabilities of falling on either side of the centerline can be calculated by the equation, $E = P^n$ where E is the expected value, P is the probability of any single event, and n is the number of consecutive observations. When $P = .50$ and $n = 8$, then $E = 0.5^8$. The probability calculations for an expected run length of up to nine observations long is presented in Table 11 beginning with $(0.5)^0 = 0$.

When the ninth consecutive point on the same side of the centerline is detected, the chances of it reflecting random variation in a controlled process are less than two chances in one thousand. In fact, many (if not most) SPC practitioners have revised this test to read “. . . eight point in a row” instead of the original nine points (e.g., Farnum, 1994). Some have even replaced “eight” with “seven” in a row (Nelson, 1984).

Table 11. Probability Calculations for Test 2

n	E
1	$(0.5)^0 = 0\%$
1	$0.5^1 = 0.50 = 50.00\%$
1	$0.5^2 = 0.25 = 25.00\%$
1	$0.5^3 = 0.125 = 12.50\%$
1	$0.5^4 = 0.0625 = 6.25\%$
1	$0.5^5 = 0.03125 = 3.13\% ^a$
1	$0.5^6 = 0.015625 = 1.51\%$
1	$0.5^7 = 0.0078125 = 0.75\%$
1	$0.5^8 = 0.00390625 = 0.38\%$
1	$0.5^9 = 0.001953125 = 0.18\% ^b$

^a Percentages are rounded to two decimals.

^b 0.18% when $E = .05^9$ is actually lower than the conventional “false alarm” probability in statistical process control of 0.0027 or about three in one thousand.

In the Individuals Chart in Figure 2, the fifth data point (reflecting the mean from the second half of 1993) rose above the centerline of the chart and each of the subsequent nine observations remained above the process centerline. Beginning with the second half-year of 1998, the next 11 observations were all below the process mean. Therefore, each of these patterns failed the standards of Test 2.

Test 3. Although Test 3 was not routinely performed for all outcome indicators, a violation of that test was observed in Figure 2 as the descending sequence of cases initiated between 1997 and 2000. Each of eight consecutive observations was lower than its preceding observation during that period, and those points are enclosed by an oval in Figure 2. A threshold of six consecutive observations, either ascending or descending, reflects an unlikely probability of the pattern happening by chance that is approximately the same as Test 2. Therefore, the data from that period indicated a special cause of variation.

Moving range analysis. In addition to the indicators shown in the Individuals Chart, the Moving Range Chart also had a point beyond the UCL. The fifth point of data in the Moving Range Chart was more than three standard deviations higher than the process mean, which indicated excessive variability in the process. Thus, it was concluded that the process contained the influence of a special cause of variation.

Interpretation of Findings

As mentioned earlier, SPC identifies the presence and influence of special causes of process variation but it does not diagnose the nature of those special causes. Therefore, the patterns reflected by the data in Figure 2 might be from any number of influences on the process. For example, the two Test 2 violations found in the Individuals Chart in Figure 2 have often been found to reflect a pronounced shift in a work process. Such a process shift might entail two separate work processes, each with their own mean and control limits. Speculating further for the sake of example, the first work process might be reflected by the left-hand side of the Individuals Chart which roughly spans 1992 to 1998. During that period of years, large numbers of case complaints apparently prompted a corresponding rise in the number of investigations initiated. If an increased use of illicit drugs (e.g., cocaine) among the urban poor during that period precipitated an increase in the number of complaints received by JFS, then that might have been among the special cause(s) of process variation reflected in the data.

Whatever the special cause(s) might have been during the 1992-98 period, a process change occurred sometime during 1999 that led to a steady decline in the number of investigations initiated. Beginning in the Year 2000, the process followed a different pattern than it had during most of the 1990s, with a lower mean and greatly reduced variation.

The net result from these analyses of the data in Figure 2 was that the process of initiating investigations within one hour, at least as reflected in the number of investigations initiated, was found to be clearly out of control. Because an excessive amount of uncontrolled variation was present in the work process, any affects on the work process due to potentially real but subtler influences, like the PFP program, would likely be hidden. Therefore, it was concluded that the process depicted in Figure 2, the number of investigations initiated within one hour, was not suitable for testing the impact of the PFP program on employee output.

This discussion of the data in Figure 2 has been rather extensive in order to illustrate the rationale for the application of SPC to the remaining outcome measures from JFS. The findings and interpretation of the rest of the outcome measures reviewed in this section reflected the same steps as was discussed for Figure 2.

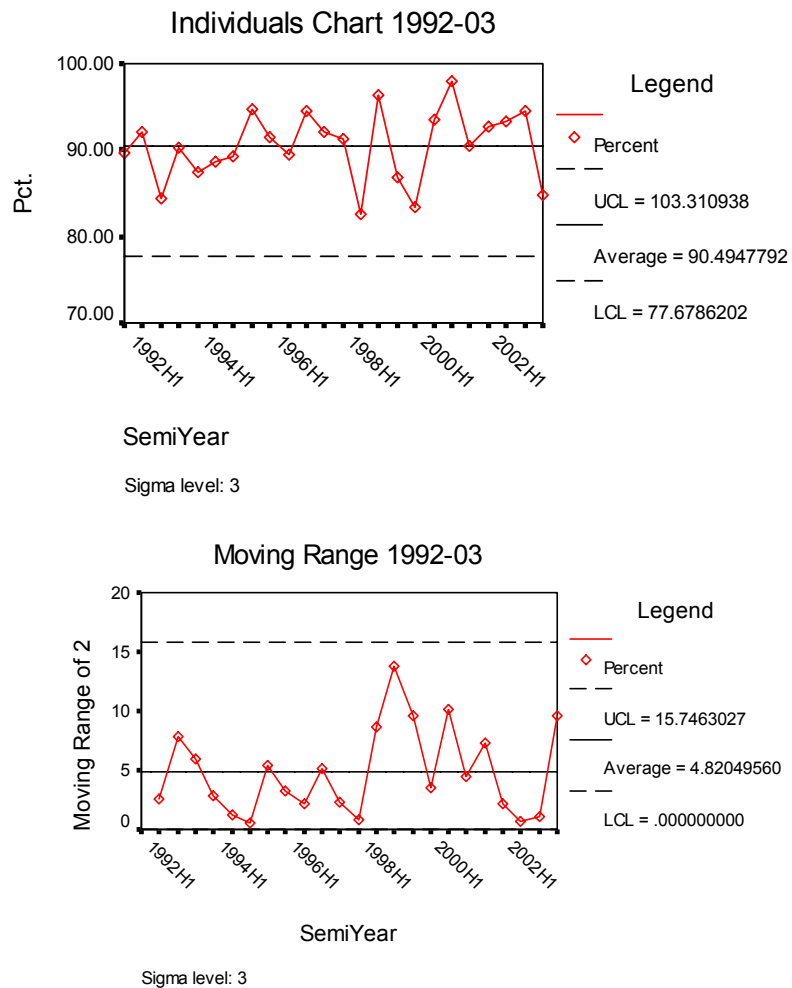
Percent of Investigations Initiated Within One Hour

Another way to consider the data on the investigations initiated within one hour was to calculate the percent of all claims investigated that were received, regardless of complaint volume. Even though the number of complaints received was out of statistical control, the percent of claims might offer a sufficiently stable process for further analysis.

Data on the percent of claims initiated within one hour of complaint are charted in Figure 3. No violations of SPC Tests 1 and 2 were detected in either the Individuals Chart or the Moving Range Chart for this process.

Because this process met the criteria established for statistical control, a non-directional t -test was performed to assess whether differences in outcome performance occurred during the period of Hamilton County's PFP program. For this analysis, the first five years and the last five years of observations between 1992 and 2003 were compared. The results from that t -test were not statistically significant: $t = 0.127$ ($df = 18$), $p > .05$. The mean percentages for the first five years and the last five years were 0.898 ($s = 0.028$) and 0.895 ($s = 0.062$), respectively. Based on these results, it was concluded that the PFP program produced no measurable effects on the percent of investigations initiated within one hour.

Figure 3. Percent of Investigations Initiated Within One Hour

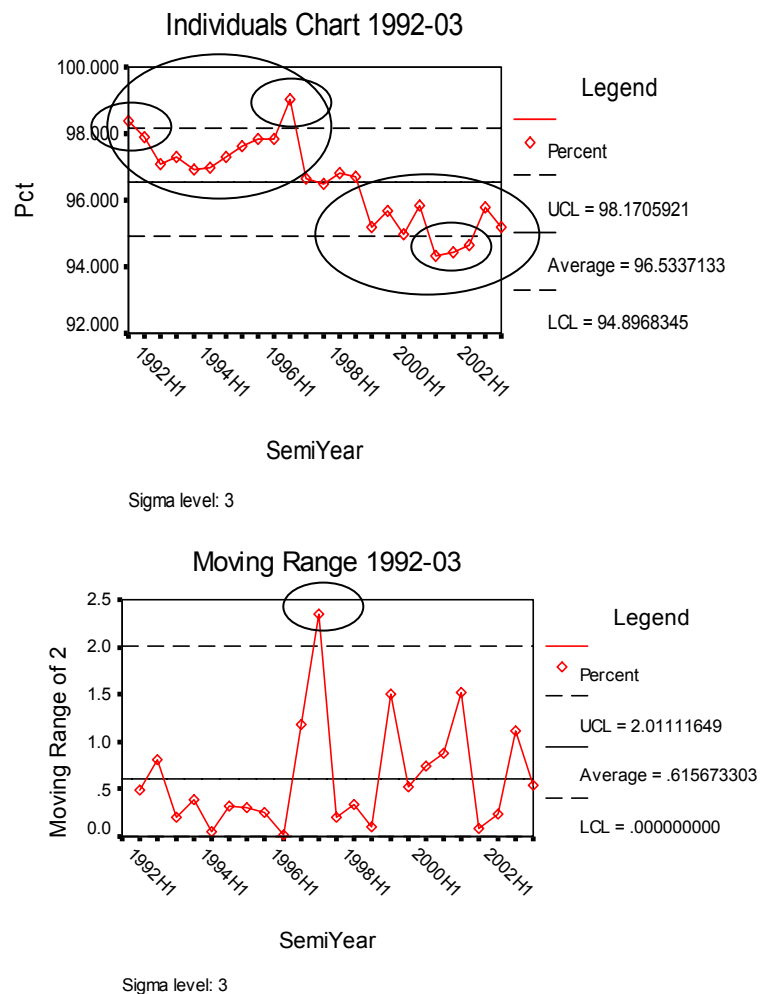


Percent of Investigations Initiated Within 24 Hours

The percent of investigations initiated within 24 hours of complaint are presented in the control charts in Figure 4. A total of six indicators of special causes of variation are shown by circles in Figure 4.

The Individuals Chart in Figure 4 shows five indicators of special causes. Two runs above the UCL and one run below the LCL were both violations of Test 1. In addition, two runs of nine or more consecutive points (Test 2) were found, one of which occurred above the centerline and one below the centerline. The special cause found in the Moving Range Chart was a Test 1 violation, a point that was farther than three standard deviations from the variation's mean. It was concluded from these findings that the percent of investigations initiated within 24 hours was out of statistical control. Therefore, this outcome measure was concluded to be unsuitable for testing the affects of the PFP program on JFS outcomes.

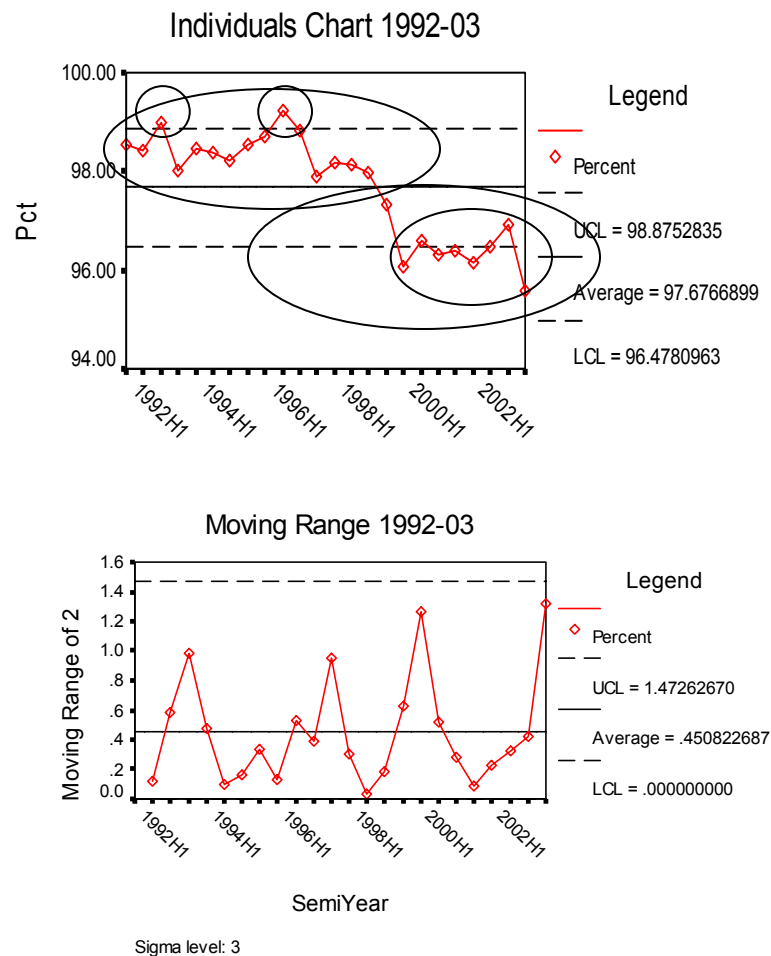
Figure 4. Percent of Investigations Initiated Within 24 Hours



Percent of Investigations Initiated Within 72 Hours

The percent of investigations initiated within 72 hours of the receipt of a complaint are presented in Figure 5. Five indicators of special causes of variation were detected in the Individuals Chart: three runs that violated Test 1 and two runs that violated Test 2. The two violations of Test 2, each occurring on opposite sides of the centerline, might reflect different work processes or an overall process shift. The latter cause seemed rather likely since the both runs on each side of the centerline appeared rather stable within their (potentially) separate process parameters. The same special causes could conceivably be at work in the 72-hour process of Figure 5 as were indicated in the 24-hour process illustrated previously in Figure 4.

Figure 5. Percent of Investigation Initiated Within 72 Hours

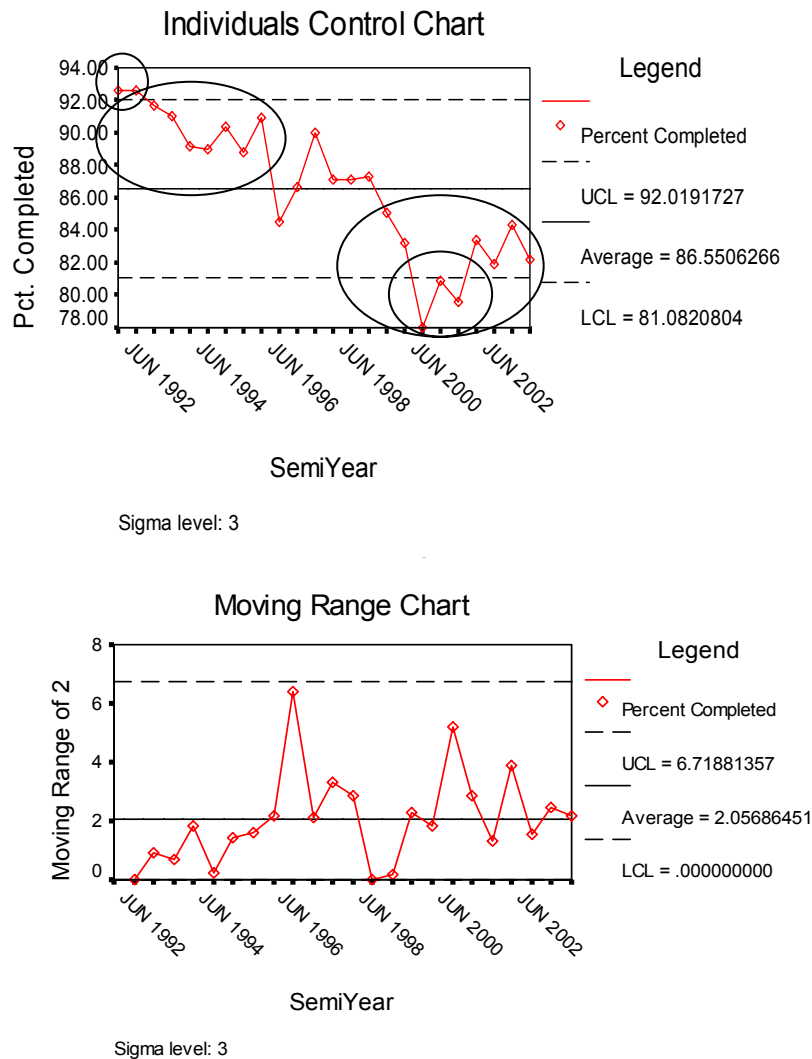


Regardless of the actual causes of the patterns found in Figure 5, that work process was shown to be out of statistical control. Therefore, that process was concluded to be not suitable for assessing the impact of the PFP program.

Percent of Investigations Completed Within 30 Days

The percent of investigations completed within 30 days are shown in Figure 6. Four indicators of special causes were found in the Individuals Chart, consisting of two runs that violated Test 1 and two runs that violated Test 2. On this basis, the percent of investigations completed within 30 days was shown to be a process that was out of statistical control. Therefore, this process was concluded to be unsuitable for testing the affects of the PFP program on JFS outcomes.

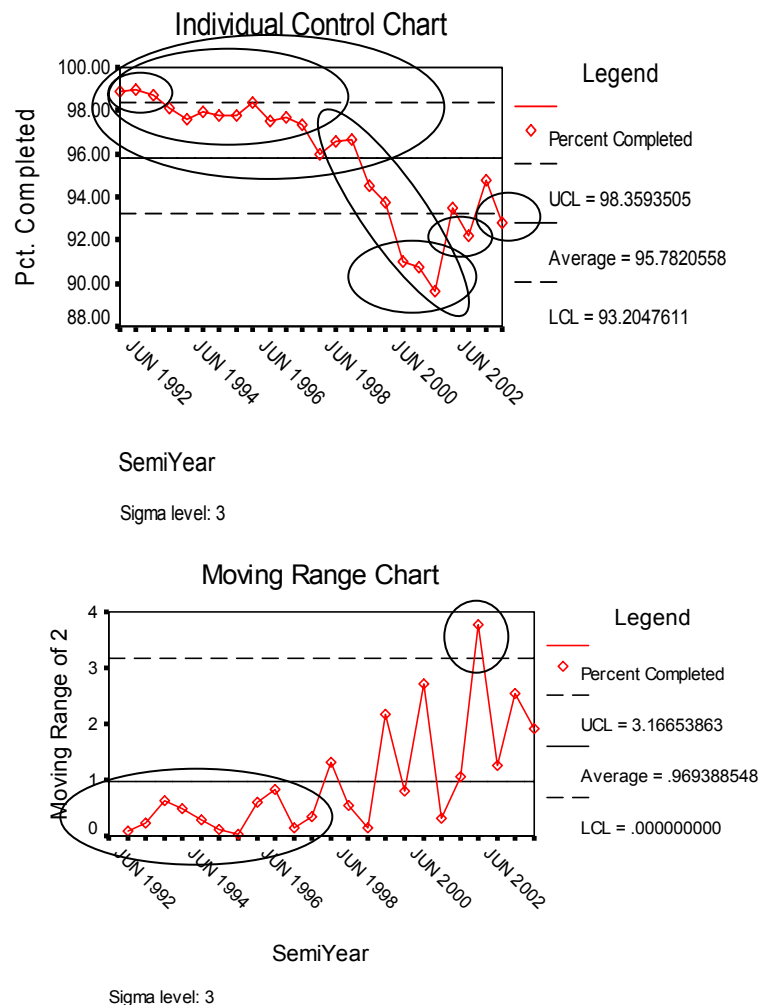
Figure 6. Percent of Investigations Completed Within 30 Days



Percent of Investigations Completed Within 45 Days

The percent of investigations completed by JFS within 45 days are shown in the charts in Figure 7. Four runs of Test 1 violations and two runs of Test 2 violations were found in the Individuals Chart. One violation of Test 1 and one violation of Test 2 were found in the Moving Range Chart. In addition, an evident violation of Test 3 was found in the Individuals Chart exhibited by six consecutive decreases in data points starting approximately in 1999.

Figure 7. Percent of Investigations Completed Within 45 Days



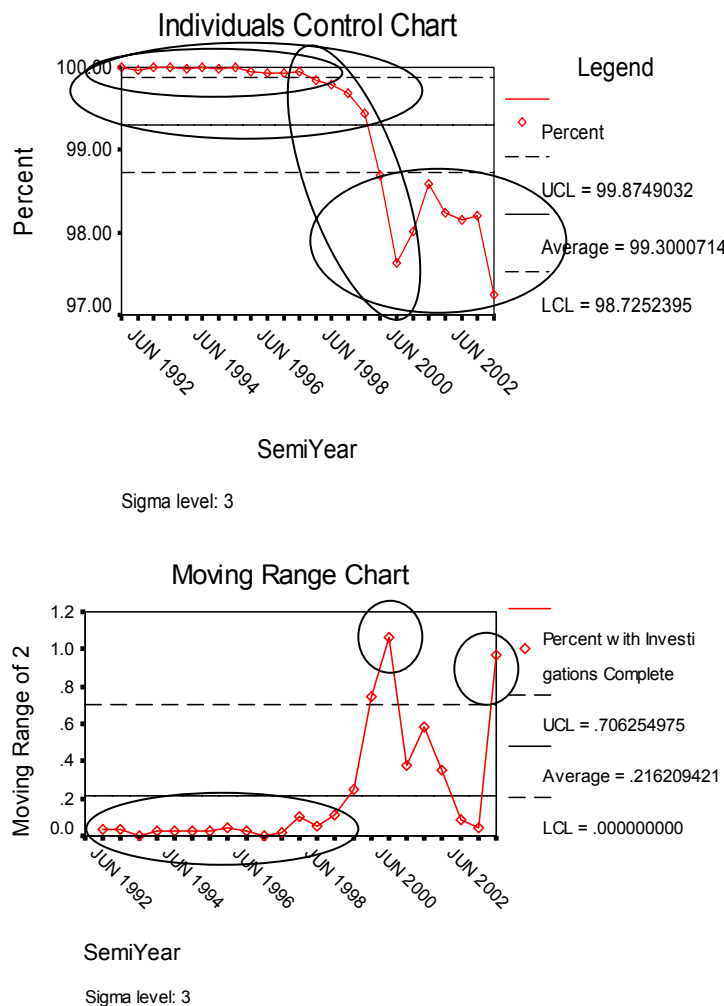
The Individuals Chart appeared to show two distinct processes beginning in 1999, with lower percentages and greater variability occurring after that period. Although they were not formally tested in this study, the wide fluctuations in the Moving Range Chart beginning in 1999 likely violated additional standard SPC tests (e.g., two out of three consecutive points falling two standard deviations away from the mean).

These findings indicated that the percent of investigations completed within 45 days was influenced by special causes and was not under statistical control. Therefore, this process was concluded to not be conducive to testing the affects of the PFP program on JFS outcome measures.

Percent of Cases with Investigations Completed

The percentages of cases with investigations completed are illustrated in Figure 8. Two long runs of Test 1 violations were detected in the Individuals Chart, plus one run of a Test 2 violation and one Test 3 violation (six consecutive declines from 1998 to 2000). The Moving Range Chart showed two violations of Test 1 and one violation of Test 2. Again, the data suggest that a process change occurred around 1999 and that change led to lower percentages of investigations completed and higher variability in the work process.

Figure 8. Percent of Cases with Investigations Completed



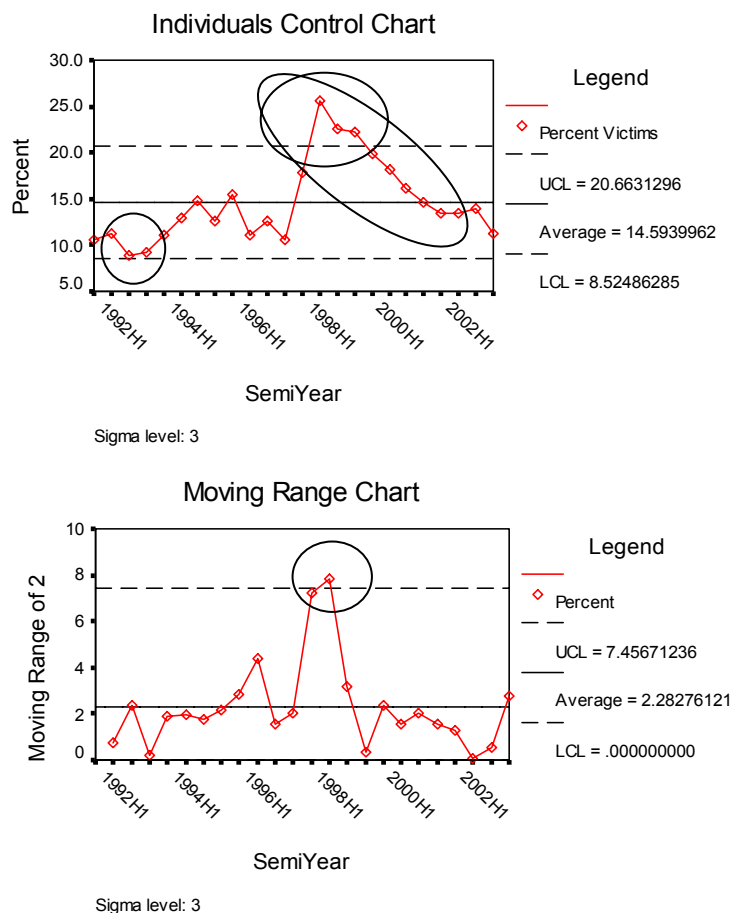
The findings from these analyses indicated that the work process depicted in Figure 8 was probably affected by special causes of variation and, therefore, was not under statistical control. Therefore, it was concluded that this work process was not suitable for testing the affect of the PFP program on work outcome measures.

One additional observation on the results from Figure 8 might be relevant. The long run of points near 100% from 1992 to 1997 in the Individuals Chart, combined with the run of low variability in the Moving Range Chart, indicated the possibility of a “ceiling effect” in the instrumentation used for monitoring the process. Since 100% is an absolute barrier to improvement, it is much easier for measures to get lower than to improve. An alternative type of measure might be needed to provide a more sensitive assessment of the common sources of variation in the work process.

Percent of Abuse Victims with Reoccurrence

The percent of child abuse victims who reported a reoccurrence of mistreatment between 1992 and 2003 are shown in Figure 9. The Individuals Chart in Figure 8 shows two violations of Test 1 and one violation of Test 3 (a run of six or more consecutive declines), from 1998 to 2002. The Moving Range Chart shows one violation of Test 1.

Figure 9. Percent of Victims with Reoccurrence

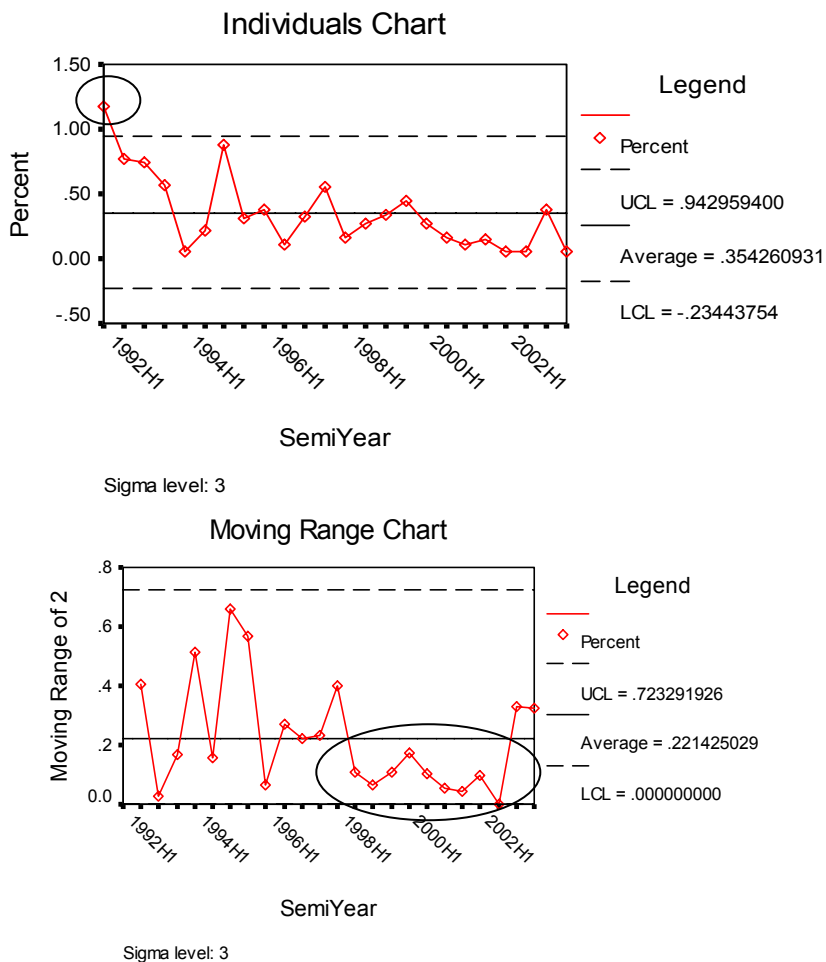


These results indicated the presence of special causes of variation in the work process. Therefore, the process was concluded to be unsuitable for testing the possible impact of the PFP program on work outcomes measures.

Percent of Substitute Care Children Abused

The percent of children who reported abuse while living in substitute care is shown in Figure 10. One violation of Test 1 can be seen in the Individuals Chart and one violation of Test 2 is circled in the Moving Range Chart. Although the general trend in the Individuals Chart appeared to head in a favorable direction, it could not be determined that the special cause of that change was due in any part to the PFP program. In the absence of the identification of the special cause(s) in this process, it was considered to be out of statistical control. Therefore, this process was concluded to be unsuitable for testing the impact of the PFP program on work outcomes.

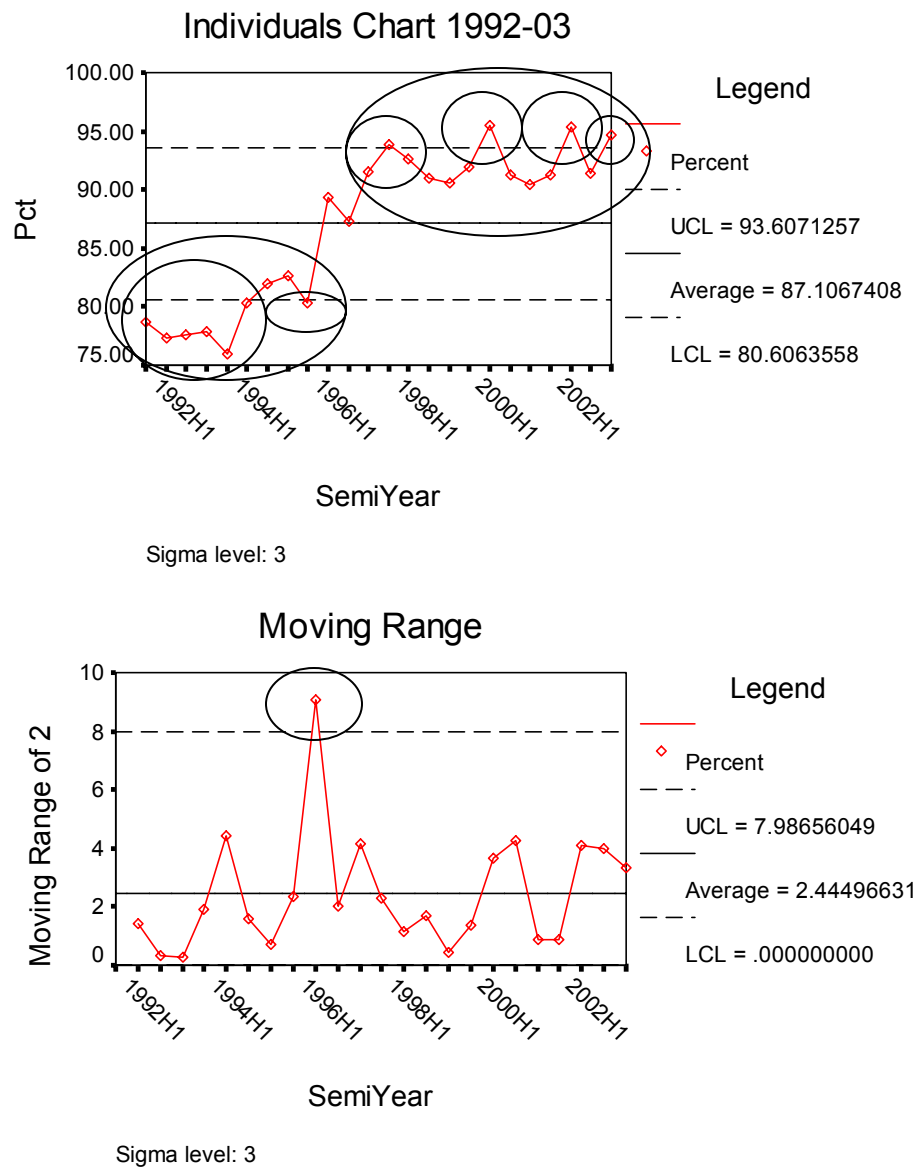
Figure 10. Percent of Substitute Care Children Abused



Percent of Initial Placements with Two Moves or Less

The percent of children living in foster care and who were moved two or fewer times is shown in Figure 11. A total of six violations of Test 1 are apparent in the Individuals Chart, one of which had a run of six consecutive points beyond the LCL. The Individuals Chart also had two violations of Test 2, on different sides of the centerline, and the Moving Range Chart showed one violation of Test 1.

Figure 11. Percent of Initial Placements with Two Moves or Less

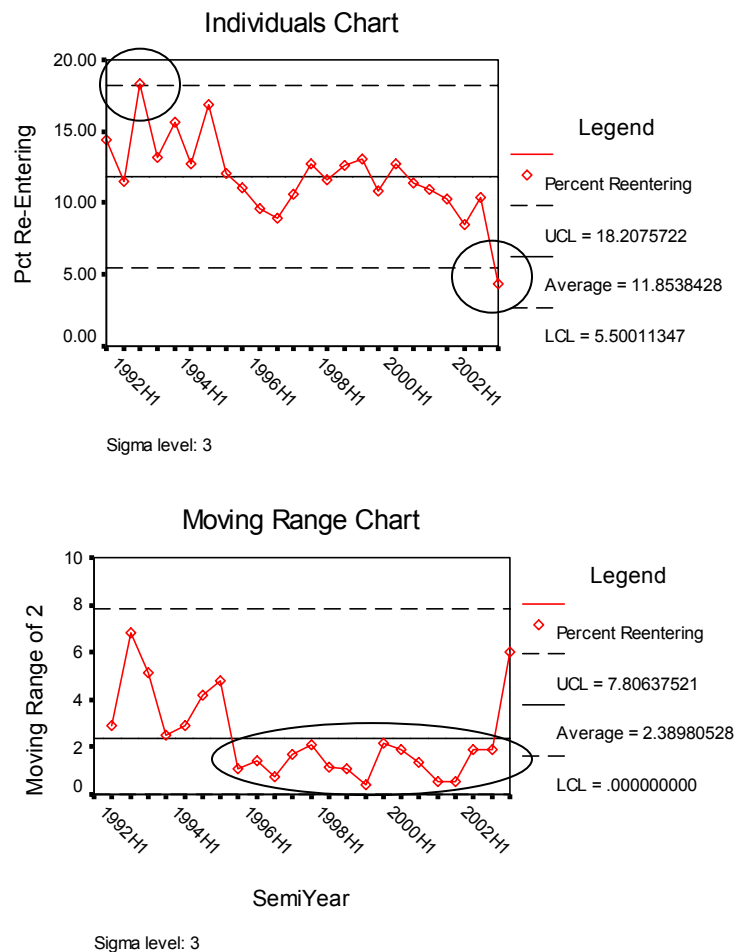


The pattern of data in Figure 11 suggested that the process shifted around 1996. Before that date, the process mean appeared to be roughly one standard deviation below the overall process mean. Between 1996 and 1998, the mean increased to approximately one standard deviation above the overall process mean and has remained at the higher level with relatively stable variability. The special cause(s) that led to that improvement was unclear, however, and the process was clearly not in statistical control. Therefore, the process shown in Figure 11 was concluded to be unsuitable for assessing the affects of the PFP program on work outcomes.

Percent of Children Re-Entering Foster Care after Exit

Data on the percent of children who entered foster care, were later reunited with their families, and then placed into foster care a second time are shown in Figure 12. The Individuals Chart showed two violations of Test 1 during the measurement period. The Moving Range chart showed one violation of Test 2 with a run of 15 consecutive points below the centerline.

Figure 12. Percent of Children Re-Entering Foster Care After Exit

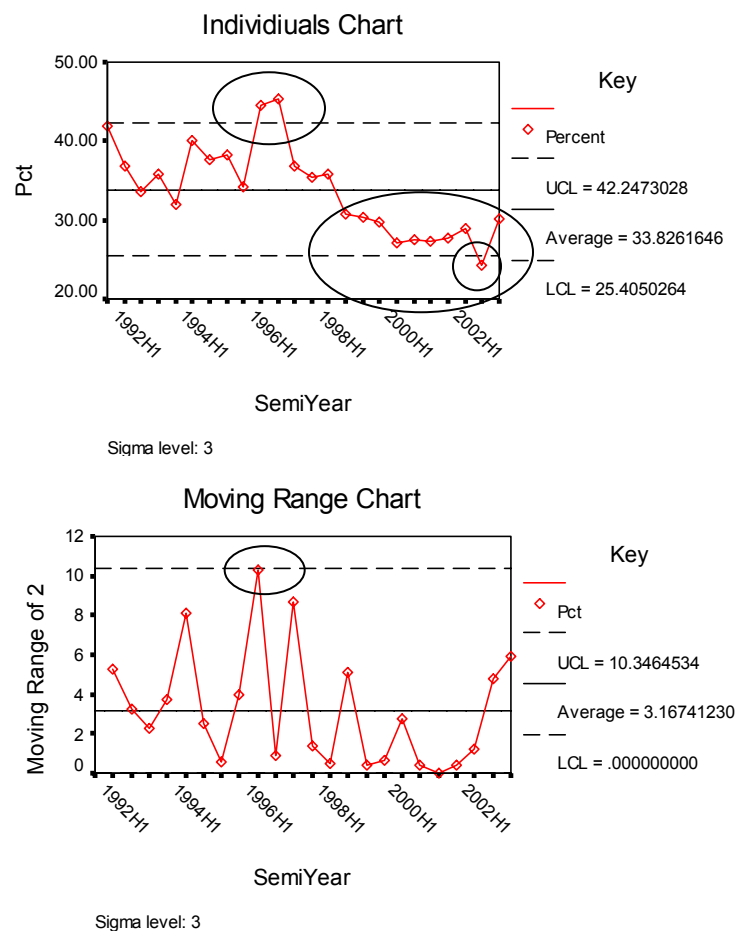


These were indicators of one or more special causes in the work process. While the direction of change appeared to be an improvement, with lower rates of re-entry and less process variation, the cause of that change was unknown. Therefore the process was concluded to be out of statistical control and not suitable for assessing the affects of the PFP program on work outcomes.

Ratio of Children in Adoptive Placement per Permanent Custody

The final work process analyzed in this study was the ratio of children residing in adoptive placement per permanent custody. Data from that process are presented in Figure 13. The Individuals Chart in Figure 13 shows two runs that violated Test 1 and one run of 10 consecutive points that violated Test 2. The Moving Range Chart shows one violation of Test 1. The special causes that produced those violations were not known and the process was concluded to be out of statistical control. Therefore, this process was concluded to be not suitable for assessing the impact of the PFP program on work outcome measures.

Figure 13. Ratio of Children in Adoptive Placement per Permanent Custody



Discussion

A total of 30 specific predictions about attitudes and perceptions of employees and supervisors were made in the form of research hypotheses. Each hypothesis was tested individually by analysis of the data from attitude survey administered at the two agencies involved in this study.

Employee Surveys

Five of the 17 hypotheses about employee perceptions and attitudes were supported by the results from the data analysis and 12 hypotheses received no support. One of the unsupported hypotheses was found to be statistically significant but in a direction that was opposite from what was predicted.

The canonical correlation for the MANOVA performed on the employee surveys indicated that differences between the JFS and FIA accounted for 15% of the total variability in survey responses. Results from the tests of six hypotheses accounted for that proportion of variance, five of which were predicted and one of which was the opposite from the original prediction.

JFS Attitude Outcomes

Four of the five directional hypotheses for the PFP program at Hamilton County JFS were supported by the findings of the present study. One non-directional hypothesis found no statistical difference, and one directional hypothesis was rejected because of statistically significant differences opposite from the hypothesized direction.

Benefits derived by JFS from the PFP program consisted of the following, as identified with their corresponding hypotheses:

- H3 PFP raises (perceptions of) employee competence on the job, at least as seen in the eyes of their coworkers.
- H5 Employees under PFP will see themselves as being rewarded for their work effort, probably in addition to their work accomplishments and, thus, might be more highly motivated.
- H2 PFP contributes to employee perceptions of high work quality.
- H6 PFP results in perceptions of service quality improvement. To the extent the employee perceptions in these two hypotheses are based on factual observations, it is very likely that PFP contributes to the delivery of higher quality children's services.

It was predicted that the PFP program at JFS would improve employee competence through the process of individual feedback discussions between employees and their supervisors, and that explicit and clearly written MWOs would improve the direction of employees' work efforts. Indirectly, those benefits were expected to facilitate the accomplishment of more employee work goals and, thus, lead to more effective job performance. These predictions were all confirmed by the results of the present study.

The favorable results stemming from the PFP program clearly indicate that JFS receives benefits in employee productivity, at least to the extent that employee perceptions of productivity are realistic. The findings about PFP were consistent with the scientific literature on the benefits from goal setting, feedback, and systemic reward contingencies. They indicate that goal setting methodologies pertain to public sector organizations as well as to private sector, and that those methodologies offer significant promise when they are introduced with buy-in from employee labor unions.

FIA Attitude Outcomes

Six of the eight directional hypotheses for FIA were rejected for lack of statistically significant findings, and one directional hypothesis was rejected because statistically significant differences that were found were opposite from the hypothesized direction. One directional hypothesis was accepted – Hypothesis 15. Of the two exploratory hypotheses for FIA, one found statistically significant differences (Hypothesis 7) and one found no differences.

One of the benefits FIA derives from CCHP is improvements in employee perceptions about turnover. Once, the disruptions caused by employee turnover were a prominent concern at FIA and it was one of the primary drivers in establishing the CCHP program. The present study found that employee perceptions of disruption at FIA are now lower than those of their counterparts in JFS. This is a very favorable outcome that reflects an effective program which appears to have achieved its central purpose. CCHP might well serve as a “best practices” model for other children's services agencies experiencing or anticipating high employee turnover.

The second benefit to employee perceptions demonstrated by the CCHP program was that of person-job fit. The “job fit” questionnaire deployed during the FIA screening and selection process is the likely explanation for these benefits, although the current study did not test that linkage specifically. At any rate, employees at FIA clearly benefited by the higher levels of intrinsic rewards they found in their work than did their counterparts in the “control” agency in this study. These findings are very encouraging. The job fit questionnaire designed by FIA would appear to be based on highly transportable principles, meaning that it could be developed and deployed by a wide range of children's services organizations. The cost-benefits from such an instrument might prove to be very important, especially as it might relate to retention rates for the agency's best employees. These potential benefits remain to be explored by future research. However, it is clear that findings from FIA are consistent with recent research in personnel selection and the fit between people and jobs.

Hypotheses with Results Opposite from Expected

Tests of two hypotheses found statistically significant differences in the direction opposite from what was predicted. Hypothesis 1 predicted that employees at JFS would be more satisfied with the process by which their performance was evaluated than would employees at FIA. Contrary to that prediction, results indicated that employees at FIA were more satisfied than employees at JFS with the performance evaluation process. A review of the JFS survey results showed that several aspects of the PFP program's administration were rated low by employees. Employees could have heavily weighed some of those portions of the program when reporting their overall satisfaction with the PFP process. For example, employee doubts about the fairness of the program's administration of merit and bonus payments could have weighed more heavily in their assessments than their actual awards of merit and bonus pay. Comparisons between JFS and FIA on specific aspects of the JFS program were not available, however, so those potential explanations could not be tested.

Hypothesis 10 predicted that FIA employees would feel better trained and prepared than employees at JFS. That prediction was based on the introduction of CWI, which provided all new employees with mandated training since its inception in 1999. However, employees at FIA felt stronger than employees at JFS that they had to learn too many things on their own when they were new on the job. Those results applied to employees hired within the last five years as well as to employees hired before five years ago.

It could be argued that "having to learn too many things on one's own" might relate as closely to the employee's supervisor and coworkers as it does to training. Even when employees are given the technical expertise of adequately perform a new job, many intangibles might still influence the level of comfort felt by the new employees. For example, warm and friendly relations with coworkers might make it easier for a new employee to ask questions, and a supportive supervisor might make the prospect of making a simple mistake less intimidating. However, relations with coworkers and with supervisors were not included in the employee surveys so arguments such as these cannot be tested at the current time.

Supervisor Surveys

Of the seven hypotheses about the perceptions and attitudes of supervisors, four were supported, two found results that were not statistically significant, and one was statistically significant but in the direction opposite from what was predicted.

Hypotheses Supported

Supervisors at both JFS and FIA appeared to be significantly affected by the outcomes from their respective program initiatives. Hypotheses concerned with those outcomes were the following:

- H19 JFS supervisors feel a greater need for more training and support for their prominent role in the PFP program.
- H20 The CCHP program has given FIA supervisors greater confidence in the qualifications of new employees.

- H22 The CCHP program has shown FIA supervisors more improvement in the quality of new employees hired today compared to five years ago.
- H24 The CCHP program has made FIA supervisors more satisfied with their agency's current procedures for recruiting and hiring employees.

As expected, JFS supervisors felt an absence of preparation for the many responsibilities of their broad and formal roles under the PFP program. While supervisors at FIA also had a performance planning and review process, the FIA program was administered in a more traditional fashion and was not as closely linked to bonus pay, not as demanding of supervisors' and employees' time, and not as visible as PFP. Therefore, the greater role responsibilities of the JFS supervisors likely created a stronger need for preparation, training, and role clarity among supervisors at JFS. In the absence of that preparation, JFS supervisors saw a gap between their needs and their current training.

Benefits from the CCHP program appeared to be very consistent and salient for the supervisors at FIA. To the extent that supervisor perceptions are based on factual observation and experience, these findings strongly imply that CCHP has been very effective in improving the quality and consistency of new hires into the FIA organization. These findings strongly support the application of behaviorally-based interviewing in standardized screening and selection procedures. The benefits from those procedures appear to be as relevant to the public sector as to the private sector, and they apparently were effective even during the highly intensive staffing operations of CCHP's initial operations.

Hypotheses with Results Opposite from Expected

Hypothesis 23 predicted that FIA supervisors regard their new employees as more adequately trained than JFS supervisors. The current study's statistically significant results indicated that the JFS supervisors, instead of FIA supervisors, were more satisfied with the training of new employees. This finding was contrary to initial predictions. Coupled with the contrary findings from Hypothesis 10, which also focused on training, these findings might indicate the need for a more careful assessment of training needs and the CWI at FIA.

Summary of Survey Findings

Each of the two innovative programs showed clear and positive results for their agencies as reflected in the perceptions and attitudes of their respective employees and supervisors. Compared to their control counterparts in the other Children's Services agency in this study, employees and supervisors under the PFP program at JFS reported:

- Higher quality of work being performed by their work units
- Greater improvement in work quality by their work units
- Higher competence in their coworkers
- Higher rewards for work effort

JFS services are likely to have improved in ways that went beyond simply their attitudinal responses of employees to a survey. It might be worthwhile to further analyze the basis of employee perceptions of work quality, coworker competence, and rewards for work effort. Such analyses might help to further clarify the linkages between the specific features of the PFP program, specific outcomes in work behavior, and benefits delivered to the recipients of children's services departments.

Both employees and supervisors at FIA also saw important areas of positive impact that are attributed to the CCHP program, including:

- Better management of employee turnover and its consequences
- Improvements in job-person fit
- Greater confidence in the qualifications of new employees
- Higher satisfaction with FIA's current procedures for recruiting and hiring employees
- Greater improvement in the quality of new employees hired

Further investigation might be warranted to gather more specific and detailed information about the benefits of the CCHP procedures. For example, a closer analysis might identify the particular ways in which the quality of new employees has improved at FIA (e.g., employees' work-related competencies, professional commitment, and other personal attributes). Those findings might then be linked to specific steps or procedures (e.g., behaviorally based interview questions) in the recruiting, screening, and hiring process at CCHP to discover the features of the program that provide the greatest benefits for their costs.

From a more theoretical perspective, the best practices at JFS and FIA offer additional support for their respective foundations in the management sciences. Goal-setting principals were incorporated into the initial design of PFP, and they were further developed during the subsequent years. Efforts at JFS were made to delineate and clarify specific goals that were consistent across all employees doing similar work, to link the goals of individual employees to organizational objectives, to provide regular and specific feedback on goal accomplishment, and to link organizational rewards to observable behavior. The PFP program at JFS demonstrated that applications of goal-setting principals in "real life" children's services agencies can have numerous benefits, at least when those programs have become firmly established and are consistently supported by union leaders and management.

In a similar way, the demonstrated benefits from CCHP were in agreement with research on the outcomes from job-fit and standardized interview procedures. CCHP was designed to add structure to FIA's recruiting, screening, and hiring processes. Part of that structure consisted of basing interview questions on verified work requirements, developing behaviorally-based questions and assessment procedures, and introducing a job-fit assessment instrument. The evidence of FIA's improvement in both job-fit and the quality of new hires found by the present study was consistent with the findings of numerous scientific investigations on employee selection practices (e.g., McDaniel, *et al.*, 1994).

Outcome Measures

The use of statistical process control techniques provided in-depth analyses of the stability of JFS work processes. Based on the outcomes from those analyses, the outcome measures available from JFS were concluded to be unsuitable for the purposes of the present study. Nearly all of the work processes investigated was found to be outside the bounds of statistical control. Thus, they were shown to be influenced by “special causes” that were of unknown origin. Those special causes influenced the patterns of outcomes across the years they were recorded. Therefore, changes in JFS outcome measures could not have been conclusively attributed to PFP under the current research paradigm.

It is of possible interest to note that the presence of special causes in work processes usually increases the variability of the work process. That is, work outcome measure become less consistent with one another when special causes are present. The consequence of greater variability at JFS was a *de facto* reduction in the statistical power in the analysis of data on the agency. Therefore, it is quite possible that the statistically significant findings of benefits from the PFP program were underestimated by the current study. A re-analysis of benefits from “best practices” programs might be warranted when the work outcome measures are brought under better statistical control.

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Attachment 1 – Michigan Employee Survey Items

Michigan CCHP Survey Items

Services Specialist – Employee Questionnaire

Services Specialist Employees

Please indicate your level of agreement with the following statements:

			<i>Strongly Agree</i>	<i>Agree</i>	<i>Neither Agree nor Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>
Training	1	Most new employees receive adequate training for their jobs.	1	2	3	4	5
Hiring	2	When I first started, the manner in which I was hired treated me with dignity and respect.	1	2	3	4	5
Hiring	3	I am satisfied with the opportunity I had to give input about my county choices for assignment when I was initially hired.	1	2	3	4	5
Turnover	4	Employee turnover in my county causes too much work for the rest of us.	1	2	3	4	5
Workload	5	My job requires more than one person can do.	1	2	3	4	5
Job Fit	6	My job makes good use of my skills and abilities.	1	2	3	4	5
Job Fit	7	I like the kind of work I do.	1	2	3	4	5
PFP	8	Performance appraisals are administered fairly in my local office.	1	2	3	4	5
PFP	9	Employees in my work unit are rewarded for their effort.	1	2	3	4	5
PFP	10	My evaluation accurately reflects what I do on a daily basis.	1	2	3	4	5

Michigan FIA Centrally Coordinated Hiring Pool (CCHP) Items

Services Specialist Employees

Please indicate your level of agreement with the following statements:

			<i>Strongly Agree</i>	<i>Agree</i>	<i>Neither Agree nor Disagree</i>	<i>Disagree</i>	<i>Strongly Disagree</i>	
Turnover	11	I currently want to transfer to another county.	1	2	3	4	5	
Productivity	12	The quality of work done in my local office is excellent.	1	2	3	4	5	
Productivity	13	My coworkers are competent in performing their jobs.	1	2	3	4	5	
Training	14	When I was new on the job, I had to learn too many things on my own.	1	2	3	4	5	
Turnover	15	Employee turnover in my local office doesn't seem to cause the kind of problems now that it did several years ago.	1	2	3	4	5	<i>Don't Know</i>
								6
Turnover	16	I took the first available job with FIA knowing that I would want to transfer to a different county as soon as an opportunity came up.	1	2	3	4	5	
Job Fit	17	Between Protective Services and Foster Care, I was placed in the position best suited for me.	1	2	3	4	5	
Turnover Geog.	18	I currently want to transfer to another county.	1	2	3	4	5	
Turnover Prog.	19	I currently want to transfer to another program area.	1	2	3	4	5	

Michigan FIA Centrally Coordinated Hiring Pool (CCHP) Items

Services Specialist Employees

<i>To what extent . . .</i>			<i>To a Very Great Extent or Always</i>	<i>To a Great Extent</i>	<i>To Some Extent</i>	<i>To a Little Extent</i>	<i>To a Very Little Extent or Not at All</i>		
Job Fit	20	. . . did you know enough about the nature of your job before you were first hired here?	1	2	3	4	5		
Workload	21	. . . is the work distributed fairly to the people in your work unit?	1	2	3	4	5		
Hiring	22	. . . are your coworkers well qualified for their jobs?	1	2	3	4	5		
Productivity	23	. . . does your local office deliver better service to customers now than five years ago?	1	2	3	4	5	<i>Don't Know</i>	
								6	

Services Specialist Employees

<i>Please indicate your level of satisfaction:</i>			<i>Very Satisfied</i>	<i>Satisfied</i>	<i>Neither Satisfied nor Dissatisfied</i>	<i>Dissatisfied</i>	<i>Very Dissatisfied</i>
Training	24	How satisfied are you with the training you received for your present job?	1	2	3	4	5
Job Sat.	25	Overall, how satisfied are you with your job?	1	2	3	4	5
PFP	26	How satisfied are you with the process by which your job performance is evaluated?	1	2	3	4	5
Hiring	27	Overall, how satisfied are you with the process by which you applied to and were hired by FIA?	1	2	3	4	5

Michigan FIA Centrally Coordinated Hiring Pool (CCHP) Items

Services Specialist Employees

Please indicate your level of satisfaction:

			<i>Very Satisfied</i>	<i>Satisfied</i>	<i>Neither Satisfied nor Dissatisfied</i>	<i>Dissatisfied</i>	<i>Very Dissatisfied</i>
Hiring	28	How satisfied are you with the county assignment you initially received?	1	2	3	4	5

Services Specialist Employees

Demographics	29	Where do you work?	1	Wayne County
			2	Urban Counties (Oakland, Macomb, Kent, Genesee)
			3	Zone 1 (Upper Peninsula)
			4	Zone 2 (Northern Lower Peninsula)
			5	Zone 3 (Western Side of Michigan, not including Kent)
			6	Zone 4 (Easter Side of Michigan, not including Wayne, Oakland, Macomb, Genesee)

Michigan FIA Centrally Coordinated Hiring Pool (CCHP) Items

Services Specialist Employees

Demographics	30	For about how many years have you worked for FIA? _____ Years _____ Months		
Demographics	31	What is your major program assignment?	1	Protective Services
			2	Foster Care
			3	Adoption
			4	Juvenile Justice
			5	Adult Services
Demographics	32	What is your gender?	1	Male
			2	Female
Demographics	33	For about how many years have you been a Case Worker (Services Specialist, Social Services Specialist, Welfare Services Specialist)? _____ Years _____ Months		
Demographics	34	What is your ethnicity?	1	Asian / Pacific Islander
			2	African American / Black
			3	Caucasian / White
			4	Hispanic
			5	Native American / Eskimo
			6	Other

Attachment 2 – Michigan Supervisor Survey Items

Michigan CCHP Survey Items

Supervisors and Managers Questionnaire

Supervisors and Managers

Please indicate your level of agreement with the following statements:

			Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	
Hiring	1	I know that I will get well-qualified people from CCHP when I need to hire new employees.	1	2	3	4	5	
Hiring	2	I am allowed enough input into the hiring decisions for my work unit.	1	2	3	4	5	
Turnover	3	Employee turnover in my local office doesn't seem to cause the kind of problems now that it did several years ago.	1	2	3	4	5	Don't Know
								6
Hiring	4	The new employees we hire today are better than they were five years ago.	1	2	3	4	5	Don't Know
								6
Hiring	5	Once I get approval to fill during a hiring freeze, it takes too long for me to get a new employee for my unit.	1	2	3	4	5	
Turnover	6	The quality of our customer service suffers whenever an employee quits or transfers out of this local office.	1	2	3	4	5	
Productivity	7	I believe the time I used to spend in the hiring process is now better used on other important work related responsibilities.	1	2	3	4	5	

Michigan CCHP Survey Items

Supervisors and Managers

Please indicate your level of agreement with the following statements:			Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	
Job Fit	8	Most of the newly hired employees do not have a realistic understanding of what a child welfare caseworker job is really like before they begin the job.	1	2	3	4	5	
Hiring	9	I would prefer to select and hire my own staff even if it meant doing more work and taking more time.	1	2	3	4	5	
Job Fit	10	Newly hired CCHP employees seem to “fit in” with my work unit just fine.	1	2	3	4	5	
Turnover	11	I feel that employees take a job in my county just to get their “foot in the door,” and plan to move to another county as soon as they can.	1	2	3	4	5	
CCHP Features	12	I trust the judgment of the other supervisors who serve on the CCHP hiring panels.	1	2	3	4	5	
CCHP Features	13	I believe that one of the benefits of the CCHP is having a consistent screening and hiring process across the state.	1	2	3	4	5	
CCHP Features	14	I believe that the behaviorally based interview format is an improvement over the interviewing style we used previously.	1	2	3	4	5	Don't Know
								6
CCHP Features	15	I find it to be burdensome when I have to travel to Lansing or Detroit to serve on an interview panel.	1	2	3	4	5	Never Participated
								6

Michigan CCHP Survey Items

Supervisors and Managers

Please indicate your level of agreement with the following statements:

			Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	
Hiring	16	Once they have a year or so of on-the-job experience, the employees hired through the CCHP process do a better job than my more experienced staff who have been around for five or more years.	1	2	3	4	5	Don't Know
								6
Hiring	17	I've seen good job applicants whom we lost because they didn't want to go to Lansing or Detroit for a job interview.	1	2	3	4	5	
Hiring	18	The employees we hire today have a greater commitment to the field of child welfare than those we were hiring five or six years ago.	1	2	3	4	5	Don't Know
								6
Turnover	19	Morale suffers significantly when my staff have to cover uncovered caseloads resulting from vacancies.	1	2	3	4	5	

Supervisors and Managers

To what extent . . .

			To a Very Great Extent or Always	To a Great Extent	To Some Extent	To a Little Extent	To a Very Little Extent or Not at All
Training	20	. . . are newly-hired employees adequately trained by the time they begin working in your local office?	1	2	3	4	5
Turnover	21	. . . is the work of your local office hurt by excessive turnover among employees?	1	2	3	4	5

Michigan CCHP Survey Items

Supervisors and Managers

<i>To what extent . . .</i>			<i>To a Very Great Extent or Always</i>	<i>To a Great Extent</i>	<i>To Some Extent</i>	<i>To a Little Extent</i>	<i>To a Very Little Extent or Not at All</i>
PFP	22	. . . have formal performance reviews helped improve the productivity and effectiveness of your subordinates?	1	2	3	4	5

Supervisors and Managers

			<i>Outstanding</i>	<i>Above Average</i>	<i>Average</i>	<i>Below Average</i>	<i>Very Poor</i>	<i>Don't Know</i>
Retrospect	23	How would you characterize the quality of staff hired prior to 1999?	1	2	3	4	5	6
Retrospect	24	How would you characterize the quality of staff hired between January 1999 and December 2002?	1	2	3	4	5	6
Retrospect	25	How would you characterize the quality of staff hired since the beginning of 2003?	1	2	3	4	5	6

Supervisors and Managers

Retrospect	26	Before 5 years ago when not under a hiring freeze, about how long did it take to refill a vacated position in your local office?	___ Weeks	<i>Don't Know</i>
				6
Retrospect	27	Over the past 5 years when not under a hiring freeze, about how long has it usually taken to fill a vacated position in your local office?	___ Weeks	<i>Don't Know</i>
				6

Michigan CCHP Survey Items

Supervisors and Managers

			<i>Very Satisfied</i>	<i>Satisfied</i>	<i>Neither Satisfied nor Dissatisfied</i>	<i>Dissatisfied</i>	<i>Very Dissatisfied</i>
Training	28	How satisfied are you with the Child Welfare Institute training given to your new employees?	1	2	3	4	5
Hiring	29	How satisfied are you with your agency's current procedures for recruiting, screening and hiring new employees?	1	2	3	4	5
PFP	30	How satisfied are you with the training and preparation you received for your role in your agency's performance planning and assessment process?	1	2	3	4	5
Hiring Retro	31	As a customer, how satisfied are you with your current results from the CCHP?	1	2	3	4	5

Supervisors and Managers

Demographics	32	Where do you work?	1	Wayne County
			2	Urban Counties (Oakland, Macomb, Kent, Genesee)
			3	Zone 1 (Upper Peninsula)
			4	Zone 2 (Northern Lower Peninsula)
			5	Zone 3 (Western Side of Michigan, not including Kent)
			6	Zone 4 (Easter Side of Michigan, not including Wayne, Oakland, Macomb, Genesee)

Michigan CCHP Survey Items

Supervisors and Managers

Demographics	33	For about how many years have you worked for FIA? _____ Years _____ Months		
Demographics	34	Are you a	1	First-Line Supervisor
			2	Second-Line Supervisor and Above
Demographics	35	For about how long have you been a supervisor or manager? _____ Years _____ Months		
Demographics	36	About how many times have you served on the interview panel for the CCHP _____ Separate Occasions		
Demographics	37	What is your gender?	1	Male
			2	Female
Demographics	38	What is your ethnicity?	1	Asian / Pacific Islander
			2	African American / Black
			3	Caucasian / White
			4	Hispanic
			5	Native American / Eskimo
			6	Other

Attachment 3 – Michigan Employee Survey Results

Technical Report

State of Michigan Family Independence Agency Employee Survey Results

February 15, 2005

Prepared by:



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Highlights of Results

CPS Human Resource Services (CPS) conducted an online survey of employees in the Services Specialist classification between October 25 and November 12, 2004. The purpose of the survey was to assess employee opinions about the fairness of the hiring process.

As a preliminary step to our survey design, we met with key FIA managers and convened focus groups of supervisors between March 2 through March 4, 2004. We also reviewed the results of a survey that FIA had conducted with employees, supervisors and managers approximately one year after the CCHP was implemented. These steps were not only important in the survey design, but also provided valuable information to supplement the findings from the online survey.

A total of 691 employees participated in the FIA employee survey. Of those participants, 74.8% were women, 23.6% were men, and 1.6% did not indicate their gender. The survey was sent to all 2133 employees in the Services Specialist classification, resulting in an overall participation rate of 32%. The largest proportion of participants came from Protective Services, followed by Foster Care and Adult Services.

Employee participation by program assignments is summarized in Table 1 below.

Table 1: Major Program Assignment

	Protective Services	Foster Care	Adoption	Juvenile Justice	Adult Services	Subtotal	Missing	Total
N	277	254	37	26	86	680	11	691
%	40.09	36.76	5.35	3.76	12.45	98.41	1.59	100.00

Zone 3 and Wayne County were the two regions with the largest numbers of participants. Table 2 provides a summary of employee participation by work location.

Table 2: Work Location

	Wayne County	Urban Counties	Zone 1	Zone 2	Zone 3	Zone 4	Subtotal	Missing	Total
N	163	126	31	60	180	125	685	6	691
%	23.59	18.23	4.49	8.68	26.05	18.09	99.13	0.87	100.00

FIA Strengths

Four areas received considerably more favorable responses than unfavorable responses from the employee survey. Those were interpreted as areas of strength for FIA, and they are outlined below.

Hiring Practices

- 81% of employees said that the manner in which they were hired treated them with dignity and respect, compared to 9% who said the manner did not treat them that way (Item 2).
- 68% of employees were satisfied overall with the process by which they applied to and were hired by FIA, compared to 10% who were dissatisfied (Item 27).

Geographic Assignment

- 65% of employees were satisfied with the opportunity to provide input about their county choices for assignment when they were initially hired, compared to 18% who were not satisfied (Item 3). Employee satisfaction in this area was much greater than when surveyed in 2000 when 53% of the respondents indicated that they believed the hiring regions to be inappropriate. The more positive response is a result of FIAs modification of the process for making employee assignments, which was based in large part on the results of the 2000 survey.
- 68% of employees disagreed with the statement that they took the first available job knowing that they would want to transfer to a different county as soon as an opportunity came up. 19% agreed with that statement (Item 16).
- 71% of employees disagreed with the statement that they currently want to transfer to another county, while 15% agreed with it (Item 18).
- 77% of employees were satisfied with the county assignment they initially received compared to 10% who were dissatisfied (Item 28).

Job Fit

- 70% of employees said their job makes good use of their skills and abilities, compared to 18% that said the opposite (Item 6).
- 81% of employees said they like the kind of work they do, while 6% said they did not like it (Item 7).
- 62% of employees thought that, between Protective Services and Foster Care, they were placed in the position best suited to them while 12% thought the opposite (Item 17).
- 57% disagreed with the statement that they wanted to transfer to another program area, while 27% agreed with that statement (Item 19).

Perceptions of Coworkers

- 65% of employees thought their coworkers were competent in performing their jobs, while 11% thought their coworkers were not competent (Item 13).

- 64% of employees thought their coworkers were well qualified for their jobs, while 7% thought their coworkers were not well qualified (Item 22).

Other Strengths

- 53% of employees thought that performance appraisals were administered fairly in their local office, while 21% thought the opposite (Item 8).
- 49% of employees said that their evaluation accurately reflects what they do on a daily basis, while 28% said it did not accurately reflect what they do (Item 10).
- 54% of employees said that the quality of work done in their local office is excellent, compared to 16% who said it was not excellent (Item 12).
- 60% of employees said that, overall, they were satisfied with their jobs, while 21% said they were not satisfied (Item 25).

Opportunities for Improvement

Two potential areas for improvement in FIA were identified based on employee responses to the survey. Those areas are outlined below.

Training

- 52% of employees indicated that new employees do not receive adequate training for their jobs, compared to 32% who thought the training was adequate (Item 1).
- 63% of employees said that, when they were new on the job, they had to learn too many things on their own while 20% said the opposite (Item 14).

Work Load

- 65% of employees said that employee turnover causes too much work for them, compared to 14% who said it was not a problem (Item 4).
- 74% of employees felt that their job required more than one person can do, while 12% indicated it was not a problem (Item 5).

Other Opportunities

- 47% of employees disagreed with the statement that employee turnover doesn't seem to cause the kind of problems now that it did several years ago (i.e., they indicated that turnover still causes the same kinds of problems), compared to 11% who agreed with that statement (Item 15).

Survey Results

The remaining pages of this report contain tables of the numerical responses to the survey questionnaire. The organization of these tables reflects the order in which questions were presented to survey participants, beginning with Item 1 and going through the last item in the survey.

In each of the tables, the Item Number is shown in the far left-hand column under the heading “#”. Next to the Item Number is the wording of the item. The number of employees and percentage of total responses are shown under each of the response options that were presented in the questionnaire.

#	Factor	Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total
1	Training	Most new employees receive adequate training for their jobs.	Frequency %	25 3.62	196 28.36	111 16.06	261 37.77	96 13.89	689 99.71	2 0.29	691 100.00
2	Hiring	When I first started, the manner in which I was hired treated me with dignity and respect.	Frequency %	158 22.87	402 58.18	67.00 9.70	45 6.51	16.00 2.32	690 99.86	3 0.43	691 100.00
3	Hiring	I am satisfied with the opportunity I had to give input about my county choices for assignment when I was initially hired.	Frequency %	143 20.69	303 43.85	118.00 17.08	84 12.16	40.00 5.79	688 99.57	3 0.43	691 100.00
4	Turnover	Employee turnover in my county causes too much work for the rest of us.	Frequency %	235 34.01	211 30.54	146.00 21.13	82 11.87	16.00 2.32	690 99.86	1 0.14	691 100.00
5	Work-load	My job requires more than one person can do. (Reverse worded item)	Frequency %	300 43.42	209 30.25	96 13.89	72 10.42	10 1.45	689 99.71	4 0.58	691 100.00
6	Job Fit	My job makes good use of my skills and abilities.	Frequency %	149 21.56	333 48.19	79 11.43	98 14.18	29 4.20	688 99.57	3 0.43	691 100.00
7	Job Fit	I like the kind of work I do.	Frequency %	215 31.11	343 49.64	83 12.01	33 4.78	11 1.59	685 99.13	6 0.87	691 100.00
8	PFP	Performance appraisals are administered fairly in my local office.	Frequency %	74 10.71	291 42.11	177 25.62	102 14.76	43 6.22	687 99.42	4 0.58	691 100.00
9	PFP	Employees in my work unit are rewarded for their effort.	Frequency %	28 4.05	134 19.39	172 24.89	226 32.71	126 18.23	686 99.28	5 0.72	691 100.00
10	PFP	My evaluation accurately	Frequency	58	279	154	148	46	685	6	691



#	Factor	Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total
		reflects what I do on a daily basis.	%	8.39	40.38	22.29	21.42	6.66	99.13	0.87	100.00
11	Turnover	I currently want to transfer to another county.	Frequency	55	48	118	245	218	684	7	691
			%	7.96	6.95	17.08	35.46	31.55	98.99	1.01	100.00
12	Productivity	The quality of work done in my local office is excellent.	Frequency	75	296	203	92	20	686	5	691
			%	10.85	42.84	29.38	13.31	2.89	99.28	0.72	100.00
13	Productivity	My coworkers are competent in performing their jobs.	Frequency	103	367	140	61	13	684	7	691
			%	14.91	53.11	20.26	8.83	1.88	98.99	1.01	100.00
14	Training	When I was new on the job, I had to learn too many things on my own.	Frequency	166	269	110	126	15	686	5	691
			%	24.02	38.93	15.92	18.23	2.17	99.28	0.72	100.00
15	Turnover	Employee turnover in my local office doesn't seem to cause the kind of problems now that it did several years ago.	Frequency	13	66	180	185	140	686	107	691
			%	1.88	9.55	26.05	26.77	20.26	99.28	15.48	100.00
16	Turnover	I took the first available job with FIA knowing that I would want to transfer to a different county as soon as an opportunity came up.	Frequency	61	72	83	293	177	686	5	691
			%	8.83	10.42	12.01	42.40	25.62	99.28	0.72	100.00
17	Job Fit	Between Protective	Frequency	148	283	162	54	29	676	15	691

#	Factor	Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total
		Services and Foster Care, I was placed in the position best suited for me.	%	21.42	40.96	23.44	7.81	4.20	97.83	2.17	100.00
18	Turnover Geog.	I currently want to transfer to another county.	Frequency	50	53	94	270	218	685	6	691
			%	7.24	7.67	13.60	39.07	31.55	99.13	0.87	100.00
19	Turnover Prog.	I currently want to transfer to another program area.	Frequency	80	108	102	218	178	686	5	691
			%	11.58	15.63	14.76	31.55	25.76	99.28	0.72	100.00

#	Factor	Item		To a Very Great Extent or Always	To a Great Extent	To Some Extent	To a Little Extent	To a Very Little Extent or Never	Subtotal	Missing or Don't Know	Total
20	Job Fit	To what extent did you know enough about the nature of your job before you were first hired here?	Frequency %	40 5.79	115 16.64	261 37.77	139 20.12	132 19.10	687 99.42	4 0.58	691 100.00
21	Workload	To what extent is the work distributed fairly to the people in your work unit?	Frequency %	44 6.37	221 31.98	236 34.15	112 16.21	72 10.42	685 99.13	6 0.87	691 100.00
22	Hiring	To what extent are your coworkers well qualified for their jobs?	Frequency %	94 13.60	328 47.47	213 30.82	36 5.21	15 2.17	686 99.28	5 0.72	691 100.00
23	Productivity	To what extent does your local office deliver better service to customers now than five years ago?	Frequency %	34 4.92	90 13.02	155 22.43	87 12.59	102 14.76	468 67.73	223 32.27	691 100.00

#	Factor	Item		Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	Subtotal	Missing or Don't Know	Total
24	Training	How satisfied are you with the training you received for your present job?	Frequency %	44 6.37	265 38.35	180 26.05	154 22.29	42 6.08	685 99.13	6 0.87	691 100.00
25	Job Sat.	Overall, how satisfied are you with your job?	Frequency %	94 13.60	322 46.60	124 17.95	111 16.06	36 5.21	687 99.42	4 0.58	691 100.00
26	PFP	How satisfied are you with the process by which your job performance is evaluated?	Frequency %	35 5.07	259 37.48	194 28.08	147 21.27	52 7.53	687 99.42	4 0.58	691 100.00
27	Hiring	Overall, how satisfied are you with the process by which you applied to and were hired by FIA?	Frequency %	78 11.29	391 56.58	144 20.84	51 7.38	21 3.04	685 99.13	6 0.87	691 100.00
28	Hiring	How satisfied are you with the county assignment you initially received?	Frequency %	209 30.25	325 47.03	85 12.30	43 6.22	24 3.47	686 99.28	5 0.72	691 100.00

Attachment 4 – Michigan Supervisor Survey Results

Technical Report

State of Michigan Family Independence Agency Supervisor Survey Results

February 15, 2005

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Highlights of Results

CPS Human Resource Services conducted an online survey of children's services supervisors and managers between October 25 and November 12, 2004. The purpose of the survey was to assess supervisory opinions about the Centrally Coordinated Hiring Pool process, which at the time of the survey had been operational for nearly six years.

As a preliminary step to our survey design, we met with key FIA managers and convened focus groups of supervisors between March 2 and March 4, 2004. We also reviewed the results of a survey that FIA had conducted with supervisors and managers approximately one year after the CCHP was implemented. These steps were not only important in the survey design, but also provided valuable information to supplement the findings from the online survey.

A primary objective of the survey was to determine if supervisors and managers perceived the CCHP process as having had a positive impact on the timeliness of filling vacancies and on the quality of new employees. From the onset, we had two primary concerns about the timing of the survey. Our first concern was with the ability of respondents to clearly recall hiring conditions (length of time to fill a vacancy and the quality of new hires) from nearly six years ago.

Our second concern was that several months before the survey was administered, FIA's serious budgetary shortfall required several changes in the CCHP process. The State imposed hiring restrictions which resulted in an increasing number of vacancies. Rather than hire new employees in anticipation of future vacancies, the selection process did not begin until after a position had become vacant and hiring authorization received. Beyond that, the pool of "extra" employees, who had traditionally been assigned to fill behind employees on leave of absence, was eliminated in August 2004. In essence, the CCHP process which supervisors were being asked to evaluate had not existed for several months.

The survey was sent to 435 supervisors and managers. A total of 230 supervisors and managers participated in the survey, resulting in an overall participation rate of 53%. The sample was comprised of 64.4% women, 33.9% men, and 1.7% who did not indicate their gender. First-line supervisors comprised 65.2% of the sample, second-line supervisors and higher comprised 33.0% and 1.7% did not indicate their job level. Their average (mean) length of time working as a supervisor or manager was 9.8 years. The average number of times the participants served on an interview panel was 2.6. Regional participation numbers and percentages for the survey are summarized in Table 1.

Table 1: Geographic Location

	Wayne County	Urban Counties	Zone 1	Zone 2	Zone 3	Zone 4	Subtotal	Missing	Total
N	46	44	14	18	57	48	227	3	230
%	20	19.13	6.09	7.83	24.78	20.87	98.70	1.30	100.00

Areas of Strength

Supervisors' responses to two items were substantially more favorable than unfavorable. Those items were:

- 48% of supervisors were satisfied with the Child Welfare Institute training given to their new employees, compared to 19% who were dissatisfied (Item 28).
- 50% of supervisors felt that they were allowed enough input into the hiring decisions for their work units, while 25% thought they were not allowed enough input (Item 2).

Areas for Improvement

Supervisors' responses were substantially more unfavorable than favorable to items that pertained to the impact of employee turnover. As stated above, we believe that the responses reflect current perceptions and opinions, and may be quite different that the responses that would have been received if the survey had been administered two or three years ago when the CCHP process was functioning as designed. Four of those items were:

Turnover

- 51% of supervisors indicated that employee turnover causes the same kind of problems now as it did several years ago, while 23% said turnover did not cause the same kind of problems (Item 3).
- 79% of supervisors said that the quality of customer service suffers whenever an employee quits or transfers out of the local office (Item 6).
- Nearly all supervisors (93%) agreed that morale suffers significantly when their staff must cover uncovered caseloads resulting from vacancies (Item 19).
- 49% of supervisors reported that the work of their offices was hurt by excessive turnover among employees, compared to 20% who reported otherwise (Item 21).

Other Potential Improvement Areas

- 54% of supervisors reported that it takes too long to get new employees once they get approval to fill during a hiring freeze, while 15% disagreed (Item 5).
- 70% of supervisors said most of the newly hired employees do not have a realistic understanding of what a child welfare caseworker job is really like before they begin the job, while 13% thought new employees do have a realistic understanding (Item 8).
- 65% of supervisors say that formal performance reviews helped improve productivity to at least to a little extent (Item 22).

Beliefs and Preferences in Hiring

A few items in the survey asked for the supervisors' expressions of belief and preference about FIA's hiring practices. Responses to those items were not necessarily "favorable" and "unfavorable" and four of them are outlined below.

- 70% of supervisors reported that they would prefer to select and hire their own staff even if it meant doing more work and taking more time, while 15% disagreed (Item 9) In contrast, based on a survey FIA conducted in 2000, after the CCHP process had been operational for just over a year, 77% of children's services managers responded that the CCHP process should be continued.
- 55% of supervisors believe that one of the benefits of the CCHP is having a consistent screening and hiring process across the state, while 17% do not believe that (Item 13).
- 50% of supervisors did not think that employees hired through CCHP performed better than their more experienced staff who have been around for five or more years, while 9% did think that (Item 16) In FIA's 2000 survey, 59% of the supervisors characterized the quality of children's services workers hired through the CCHP to be outstanding or above average.
- 62% of supervisors thought that employees hired today have no greater commitment to the field of child welfare than those hired five or six years ago, while 9% thought they do have greater commitment (Item 18).

Re-staffing of Vacancies

Two items in the supervisor survey asked for estimates of the time it took to refill vacated positions in the local office. Supervisors estimated that, before 5 years ago, it took a mean of 6.89 weeks ($s = 3.79$) to refill a vacated position. Over the past 5 years, that average dropped to 6.76 weeks ($s = 4.46$). A t-test of the difference between the two means was not found to be statistically significant ($t = -.07$, $df = 234$, $p > .05$). Therefore, it was concluded that no difference existed between the two means. Results from those two items are summarized in Table 2.

Table 2: Estimated Time to Refill Positions

Wording of Items 26 and 27	Number of Weeks					
	Before 5 Years Ago			Over the Past 5 Years		
	N_1	M_1	S_1	N_2	M_2	S_2
(Before 5 years ago) (Over the past 5 years) when not under a hiring freeze, about how long did it take to refill a vacated position in your local office?	101	6.89	3.79	136	6.76	4.46

Survey Results

The remaining pages of this report contain tables of the numerical responses to the survey questionnaire. The organization of these tables reflects the order in which questions were presented to survey participants, beginning with Item 1 and going through the last item in the survey.

In each of the tables, the Item Number is shown in the far left-hand column under the heading “#”. Next to the Item Number is the wording of the item. The number of employees and percentage of total responses are shown under each of the response options that were presented in the questionnaire.

#	Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total	
1	Hiring	I know that I will get well-qualified people from CCHP when I need to hire new employees.	Frequency	7	53	108	54	5	227	3	230
		%	3.04	23.04	46.96	23.48	2.17	98.70	1.30	100.00	
2	Hiring	I am allowed enough input into the hiring decisions for my work unit.	Frequency	31	85	31	61	19	227	3	230
		%	13.48	36.96	13.48	26.52	8.26	98.70	1.30	100.00	
3	Turnover	Employee turnover in my local office doesn't seem to cause the kind of problems now that it did several years ago.	Frequency	8	46	49	70	48	221	9	230
		%	3.48	20.00	21.30	30.43	20.87	96.09	3.91	100.00	
4	Hiring	The new employees we hire today are better than they were five years ago.	Frequency	7	40	98	49	21	215	15	230
		%	3.04	17.39	42.61	21.30	9.13	93.48	6.52	100.00	
5	Hiring	Once I get approval to fill during a hiring freeze, it takes too long for me to get a new employee for my unit. (Reverse worded item)	Frequency	30	92	69	30	5	226	4	230
		%	13.04	40.00	30.00	13.04	2.17	98.26	1.74	100.00	
6	Turnover	The quality of our customer service suffers whenever an employee quits or transfers out of this local office. (Reverse worded item)	Frequency	88	93	31	12	2	226	4	230
		%	38.26	40.43	13.48	5.22	0.87	98.26	1.74	100.00	

#		Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total
7	Productivity	I believe the time I used to spend in the hiring process is now better used on other important work related responsibilities.	Frequency	11	43	88	76	9	227	3	230
			%	4.78	18.70	38.26	33.04	3.91	98.70	1.30	100.00
8	Job Fit	Most of the newly hired employees do not have a realistic understanding of what a child welfare caseworker job is really like before they begin the job. (Reverse worded item)	Frequency	54	108	33	28	3	226	4	230
			%	23.48	46.96	14.35	12.17	1.30	98.26	1.74	100.00
9	Hiring	I would prefer to select and hire my own staff even if it meant doing more work and taking more time.	Frequency	64	96	32	29	5	226	4	230
			%	27.83	41.74	13.91	12.61	2.17	98.26	1.74	100.00
10	Job Fit	Newly hired CCHP employees seem to “fit in” with my work unit just fine.	Frequency	3	76	118	25	4	226	4	230
			%	1.30	33.04	51.30	10.87	1.74	98.26	1.74	100.00
11	Turnover	I feel that employees take a job in my county just to get their “foot in the door,” and plan to move to another county as soon as they can. (Reverse worded item)	Frequency	22	40	69	83	12	226	4	230
			%	9.57	17.39	30.00	36.09	5.22	98.26	1.74	100.00

#		Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total
12	CCHP Features	I trust the judgment of the other supervisors who serve on the CCHP hiring panels.	Frequency	5	81	95	39	6	226	4	230
			%	2.17	35.22	41.30	16.96	2.61	98.26	1.74	100.00
			Frequency	12	116	59	32	6	225	5	230
13	CCHP Features	I believe that one of the benefits of the CCHP is having a consistent screening and hiring process across the state.	%	5.22	50.43	25.65	13.91	2.61	97.83	2.17	100.00
			Frequency	22	89	30	47	28	216	14	230
14	CCHP Features	I believe that the behaviorally based interview format is an improvement over the interviewing style we used previously.	%	9.57	38.70	13.04	20.43	12.17	93.91	6.09	100.00
			Frequency	32	57	57	48	11	205	25	230
15	CCHP Features	I find it to be burdensome when I have to travel to Lansing or Detroit to serve on an interview panel. (Reverse worded item)	%	13.91	24.78	24.78	20.87	4.78	89.13	10.87	100.00
			Frequency	1	19	71	84	30	205	25	230
			Frequency	1	19	71	84	30	205	25	230
16	Hiring	Once they have a year or so of on-the-job experience, the employees hired through the CCHP process do a better job than my more experienced staff who have been around for five or more years.	%	0.43	8.26	30.87	36.52	13.04	89.13	10.87	100.00
			Frequency	1	19	71	84	30	205	25	230

#	Item		Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Subtotal	Missing or Don't Know	Total
17	Hiring	I've seen good job applicants whom we lost because they didn't want to go to Lansing or Detroit for a job interview. (Reverse worded item)	Frequency 3	20	118	69	16	226	4	230
			% 1.30	8.70	51.30	30.00	6.96	98.26	1.74	100.00
18	Hiring	The employees we hire today have a greater commitment to the field of child welfare than those we were hiring five or six years ago.	Frequency 4	18	47	100	43	212	18	230
			% 1.74	7.83	20.43	43.48	18.70	92.17	7.83	100.00
19	Turnover	Morale suffers significantly when my staff have to cover uncovered caseloads resulting from vacancies. (Reverse worded item)	Frequency 155	60	8	0	2	225	5	230
			% 67.39	26.09	3.48	0.00	0.87	97.83	2.17	100.00

#	Item		To a Great Extent or Always	To a Great Extent	To Some Extent	To a Little Extent	To a Very Little Extent or Never	Subtotal	System	Total	
20	Training	To what extent are newly-hired employees adequately trained by the time they begin working in your local office?	Frequency	1	20	128	50	25	224	6	230
		%	0.43	8.70	55.65	21.74	10.87	97.39	2.61	100.00	
21	Turnover	To what extent is the work of your local office hurt by excessive turnover among employees? (Reverse worded item)	Frequency	41	71	68	28	17	225	5	230
		%	17.83	30.87	29.57	12.17	7.39	97.83	2.17	100.00	
22	PFP	To what extent have formal performance reviews helped improve the productivity and effectiveness of your subordinates?	Frequency	3	8	74	64	77	226	4	230
		%	1.30	3.48	32.17	27.83	33.48	98.26	1.74	100.00	

#	Item			Outstanding	Above Average	Average	Below Average	Very Poor	Subtotal	Missing or Don't Know	Total
23	Staff Quality	How would you characterize the quality of staff hired prior to 1999?	Frequency	10	91	98	3	1	203	17	230
			%	4.35	39.57	42.61	1.30	0.43	88.26	7.39	100.00
24	Staff Quality	How would you characterize the quality of staff hired between January 1999 and December 2002?	Frequency	3	75	117	15	3	213	17	230
			%	1.30	32.61	50.87	6.52	1.30	92.61	7.39	100.00
25	Staff Quality	How would you characterize the quality of staff hired since the beginning of 2003?	Frequency	5	71	93	20	3	192	38	230
			%	2.17	30.87	40.43	8.70	1.30	83.48	16.52	100.00

#	Item		Mean	S	N	Min	Max
26	Staffing	Before 5 years ago when not under a hiring freeze, about how long did it take to refill a vacated position in your local office?	6.89	3.79	101	1	25
27	Staffing	Over the past 5 years when not under a hiring freeze, about how long has it usually taken to fill a vacated position in your local office?	6.76	4.46	136	2	30

#	Item			Very Satisfied	Satisfied	Neither Satisfied nor Dissatisfied	Dissatisfied	Very Dissatisfied	Subtotal	Missing or Don't Know	Total
28	Training	How satisfied are you with the Child Welfare Institute training given to your new employees?	Frequency	13	97	72	38	6	226	4	230
			%	5.65	42.17	31.30	16.52	2.61	98.26	1.74	100.00
29	Hiring	How satisfied are you with your agency's current procedures for recruiting, screening and hiring new employees?	Frequency	7	77	72	64	7	227	3	230
			%	3.04	33.48	31.30	27.83	3.04	98.70	1.30	100.00
30	PFP	How satisfied are you with the training and preparation you received for your role in your agency's performance planning and assessment process?	Frequency	3	76	85	53	9	226	4	230
			%	1.30	33.04	36.96	23.04	3.91	98.26	1.74	100.00
31	Hiring Retro	As a customer, how satisfied are you with your current results from the CCHP?	Frequency	8	65	107	38	7	225	5	230
			%	3.48	28.26	46.52	16.52	3.04	97.83	2.17	100.00